

East Barnwell

A New Local Centre



1.0 Project Context

1.1 The East Barnwell Area

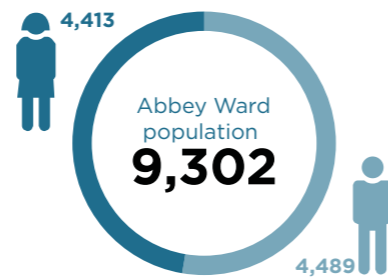
East Barnwell is a distinct community in the east of the City arising from the construction of Local Authority housing in the mid twentieth century. The area is bordered by Coldham's Common, Stourbridge Common and Ditton Meadows to the west and Cambridge Airport to the east.

The infographics opposite show a breakdown of the East Barnwell area (2019) - particularly how three of the local neighbourhoods fall within the more deprived areas of England.

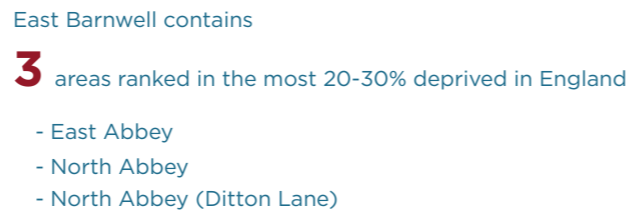
Currently, due to the UK housing crisis, new homes are needed across Cambridge. The most common housing tenure in East Barnwell is council rented properties at 28%, which is a higher proportion than Cambridge as a whole. This shows that new affordable housing is needed in the local area.

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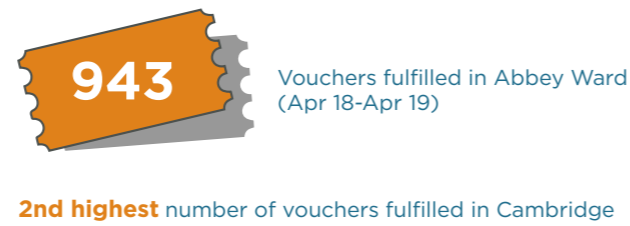
Population



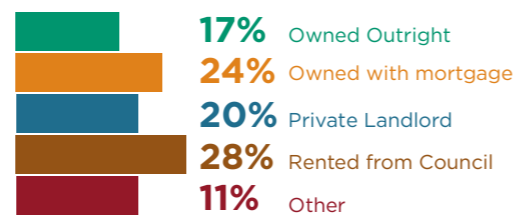
Deprivation



Food Bank Use



Housing Tenure



Open Space

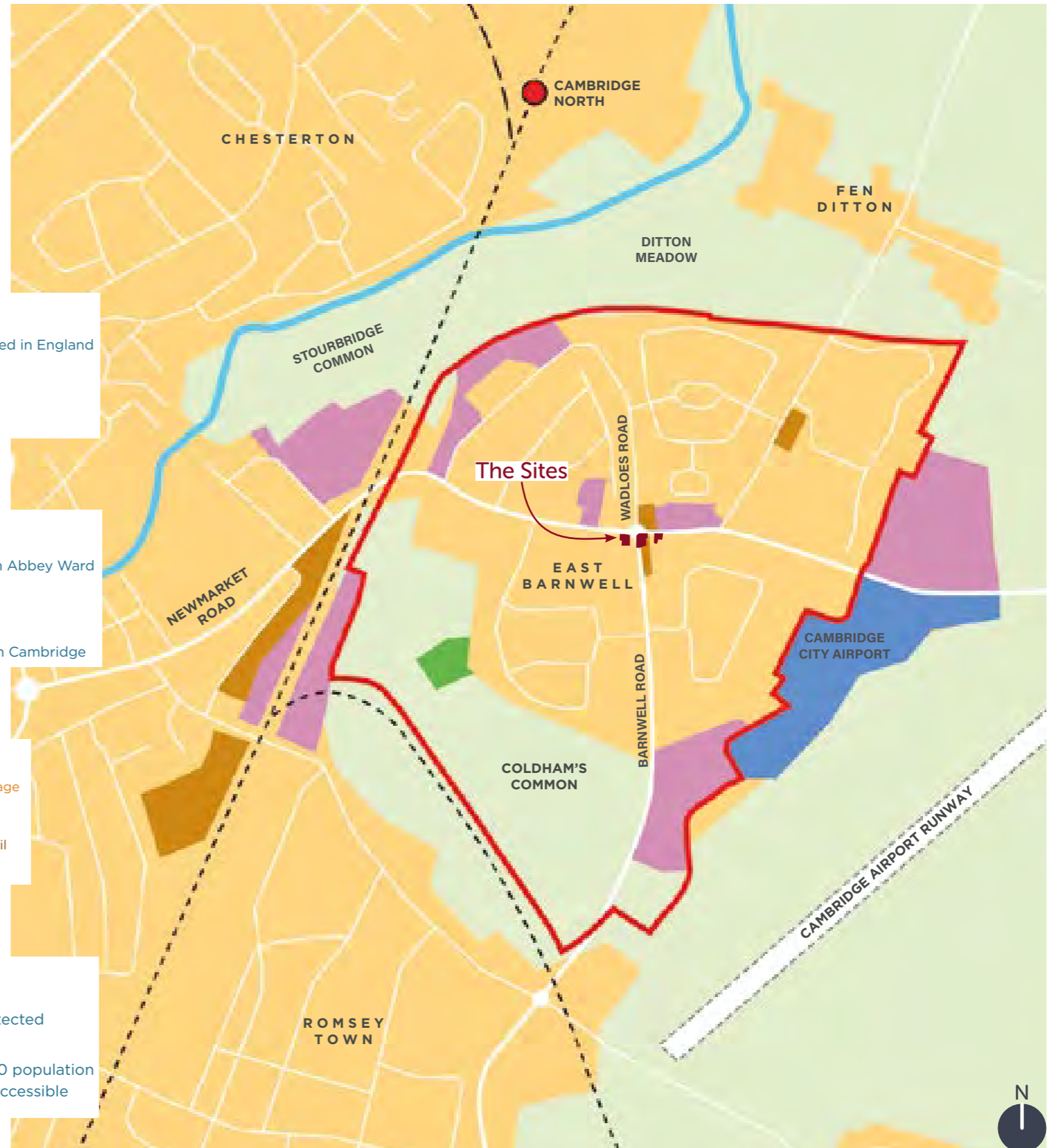
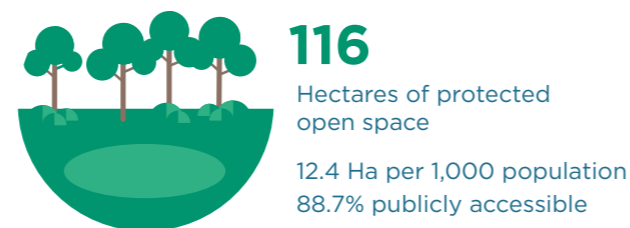


Diagram from the 'Framework for Change' document

1.2 Framework for Change

Although there has been a number of major redevelopment in the area, these have been focused on the airport and neighbouring part of South Cambridgeshire with very little investment in community facilities or the local centre of East Barnwell. A long-term plan to create a new community centre has not been realised despite efforts over several years.

A study was undertaken in 2019 of the three local neighbourhoods and results demonstrated the need for good quality local community facilities.

In response to the study and problems faced by the area, the Council carried out a consultation exercise with the local community which led to the development of a Framework for Change (in May 2021) and a vision for the future of East Barnwell.

The proposals being considered today have arisen from this vision for East Barnwell Local Centre.

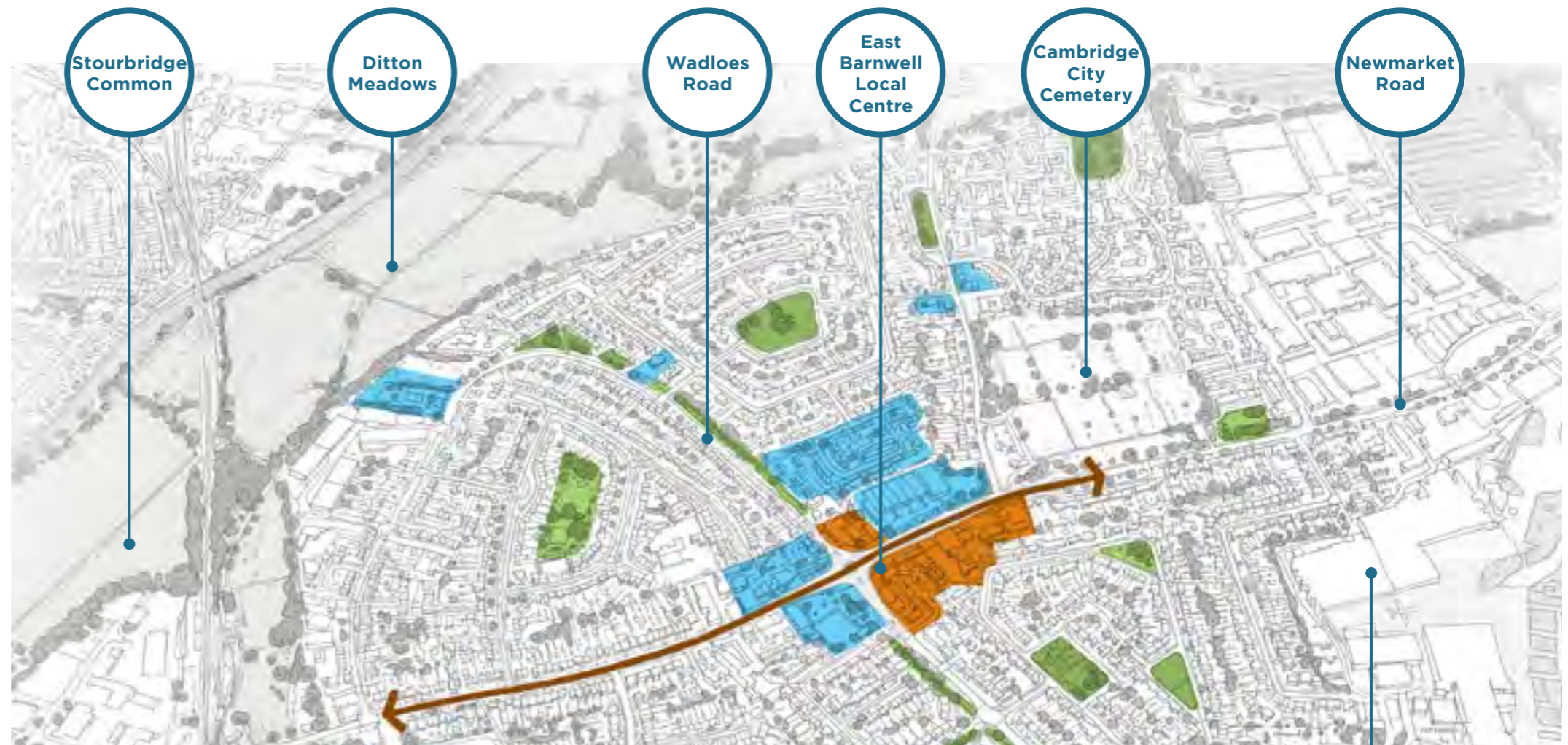
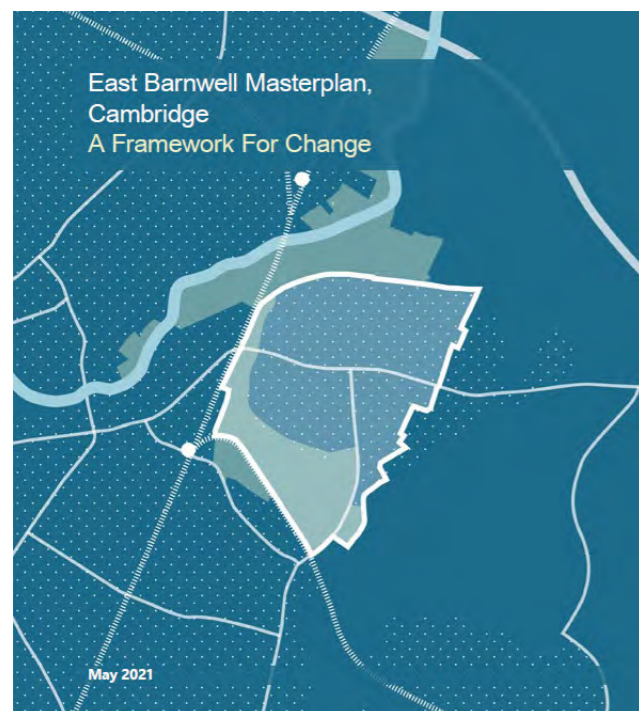


Diagram from the 'Framework for Change' document - summary of the main themes of feedback received



1.3 Site Condition

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Site 1 - View looking south of the mature trees along the eastern side of site 1. Shows the nuisance car parking on the grass verge



Site 1 - View looking down Rawlyn Close, with existing bowls club to the right.



Site 2 - View of NW corner of the site, by the roundabout, showing the level change on site



Site 2 - View of existing shops

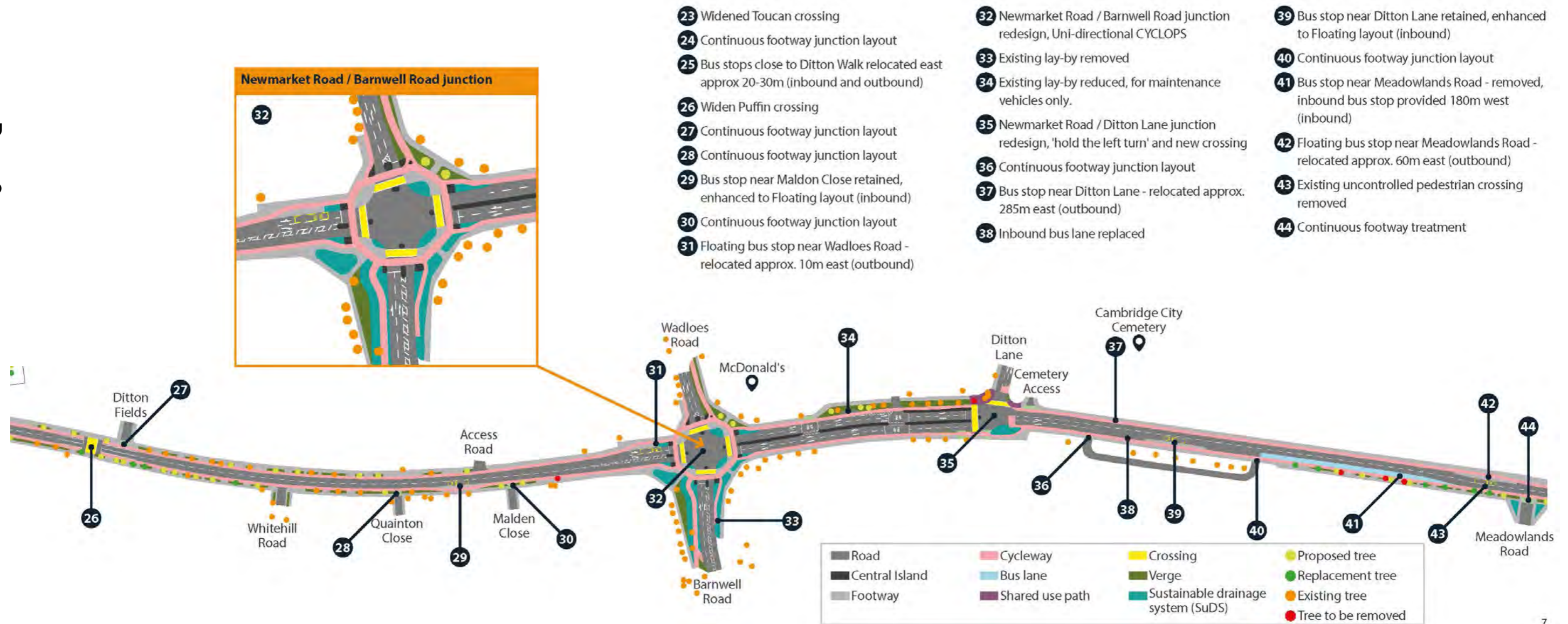
1.4 GCP Cambridge Eastern Access Proposals

The GCP Eastern Access proposals aim to:

- Improve the green space on Newmarket Road;
- Provide better connections by improving existing and providing new pedestrian crossings;
- Encourage people to change to walking, cycling and public transport rather than using private cars;
- Provide improved bus stop facilities and bus priority measures. Enable increased levels of walking and cycling by residents living along Newmarket Road; and
- Support the delivery of sustainable planned developments including Marleigh and Cambridge East (Cambridge Airport).

[GCP Cambridge Eastern Access Project Summary, 2023]

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1.5 Cambridge Investment Partnership (CIP)

Cambridge Investment Partnership (CIP) is an equal partnership between Cambridge City Council and Hill Investment Partnerships. CIP is supporting the Council to deliver new community facilities and affordable homes across the city by developing council-owned land and other sites. The Partnership model allows the joint investment of land, funding and professional expertise in housing and mixed-use development.

CIP is focused on tackling Cambridge's affordable housing shortage, optimising value for the Council whilst promoting excellence in design as well as placemaking by improving or increasing community facilities in neighbourhoods in and around Cambridge.

Working corroboratively with the County Council unlocks the opportunity for CIP to regenerate the local centre in East Barnwell in response to the Framework for Change.

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The Meadows Community Centre - Arbury Road, Cambridge



Ironworks residential development with community centre - Mill Road, Cambridge



The Meadows Community Centre - Arbury Road, Cambridge

2.0 Vision and Process

2.1 Existing Site

Central to East Barnwell area is the junction between Newmarket Road (running east-west) and Barnwell Road and Wadloes Road running north-south. This key route, though acting as a main connection for the area to Cambridge City Centre and beyond, on a local scale, bisects the area and creates division rather than a strong central focus for the community.

The area to the south of the junction and roundabout between Newmarket Road and Barnwell Road has been identified, in the Framework for Change, as opportunity sites to provide a new local centre; a heart for East Barnwell which would amalgamate existing but separate and disjointed community facilities such as preschool, library, community centre and shops.

Therefore, the proposed development sites (Site 1 and Site 2) as shown on the right, has been identified for redevelopment by Cambridge Investment Partnership (CIP) to deliver high quality regeneration of the area by re-providing local amenities, developing the local centre and increasing high quality housing for the area.

The proposed development would also replace the existing community buildings located to the east of Site 2 (shown in dashed red line), which would remain active until the new local centre is delivered; following which, will be redeveloped.

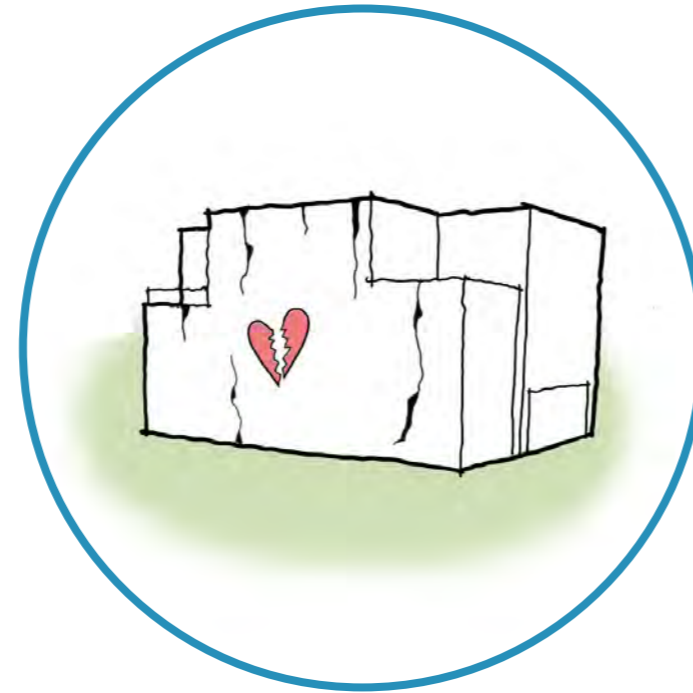


Aerial view of the sites

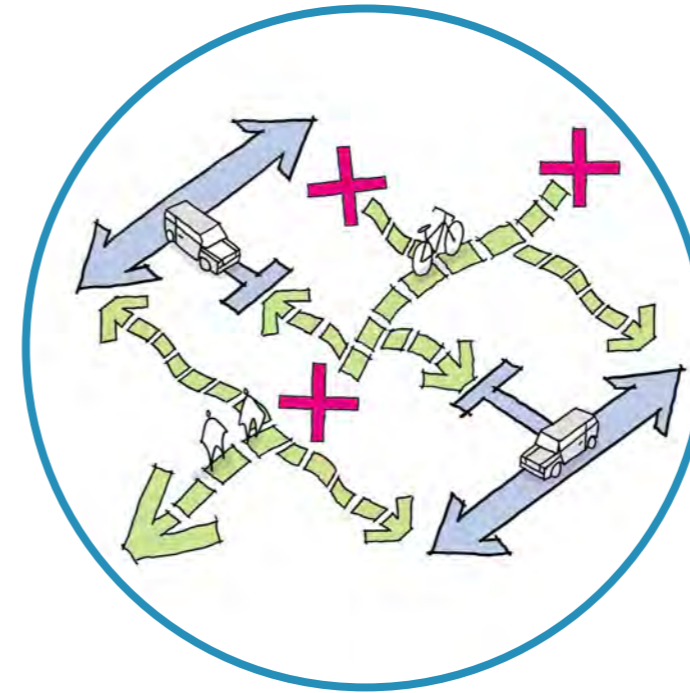
2.2 Key Challenges

The existing sites have several key challenges that the proposals need to address:

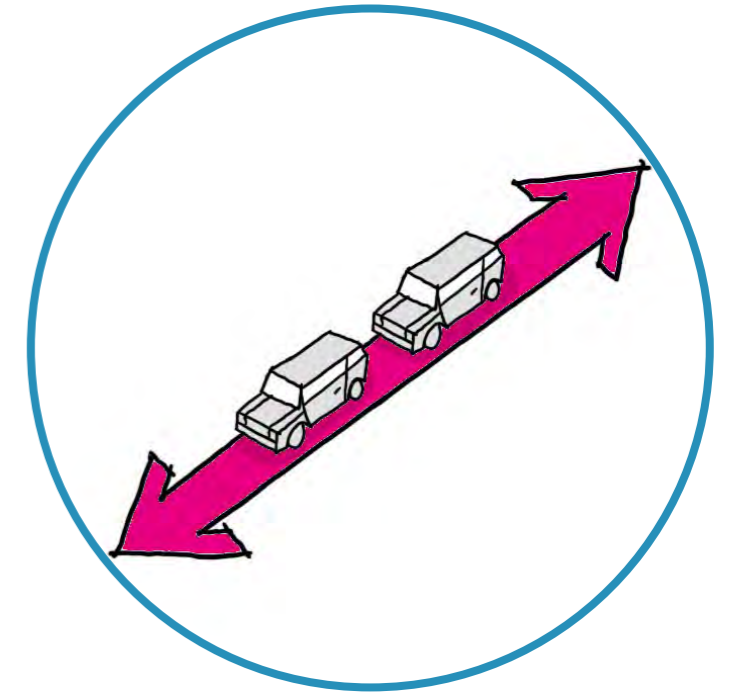
- > Poor quality community facilities that do not serve the local residents and are fragmented in several separate buildings along a busy road
- > Limited pedestrian or cycle links into the existing neighbourhoods
- > Busy Newmarket Road to the north of the sites with another main road bisecting Sites 1 and 2
- > Poor quality accommodation that doesn't meet the needs of the residents
- > Designated open space on Site 1 is not accessible to all
- > Informal parking on the grass verges of Site 1 during football matches
- > Site 2 is dominated by car parking



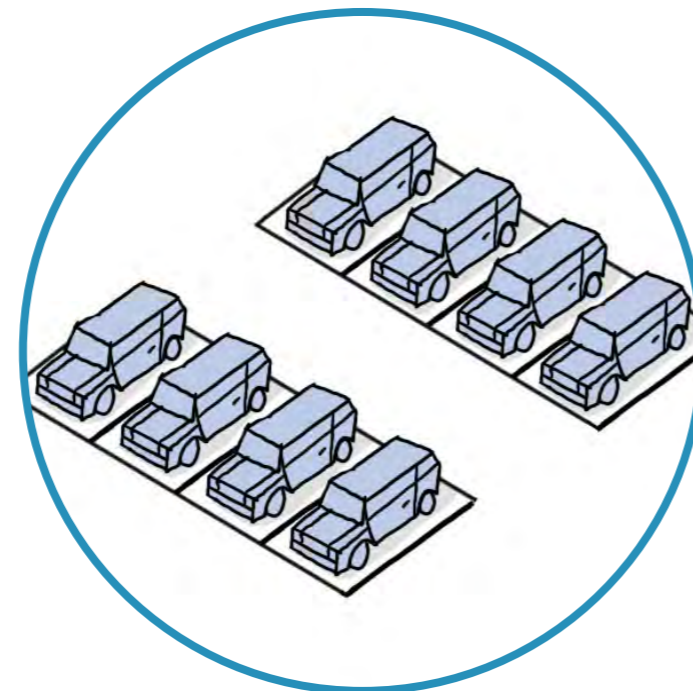
Poor quality community facilities



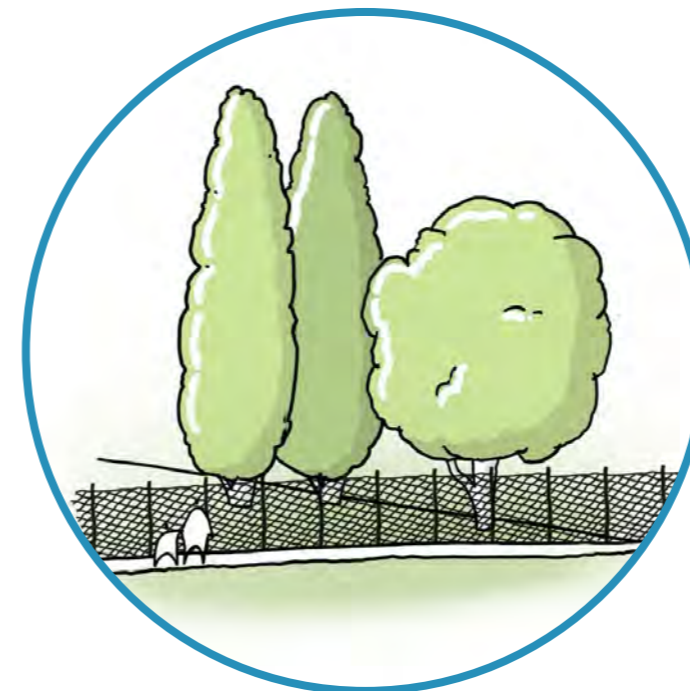
Limited path and cycle networks



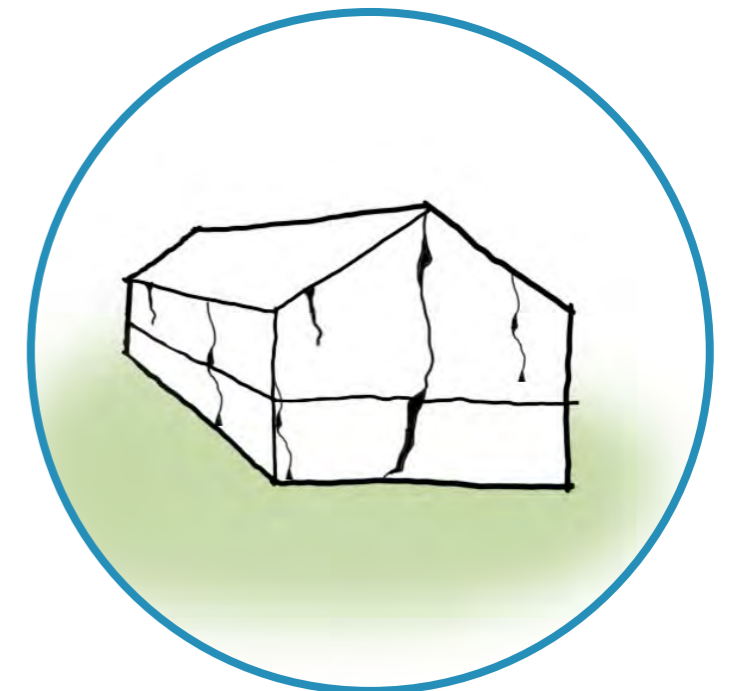
Busy roads around the sites



Dominant car parking



Open spaces not accessible to all

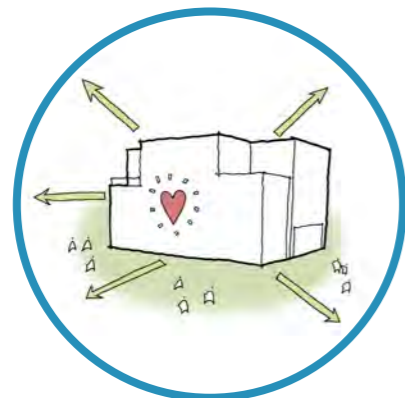


Poor quality accommodation

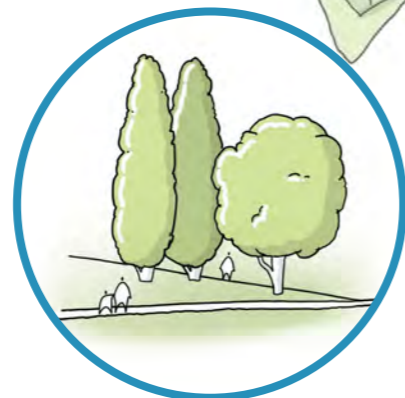
2.3 Project Opportunities

There are several opportunities across the two sites to create an exciting new local centre:

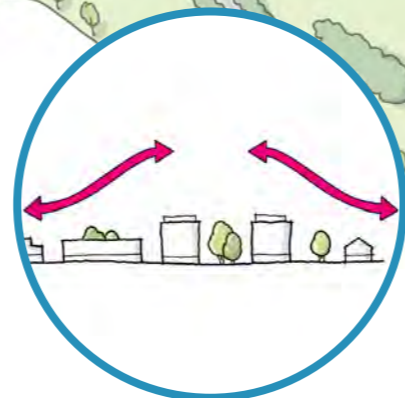
- > New local centre facilities, including a community centre, library and pre-school, plus shops and a cafe
- > Creating a variety of public open spaces for the community to use - creation of new, free, spaces for local people to use for socialising and play to promote community and healthy living
- > Opportunity to increase the height on site to emphasise the new local centre
- > Link into the existing path and cycle networks to promote connections to local neighbourhoods and public transport
- > Incorporate future GCP proposals which improve the adjacent roundabout for more pedestrian and cycle connections
- > Creation of new homes, providing much needed local housing stock
- > Opportunity for comprehensive consultation with a variety of residents, local interest groups and stakeholders



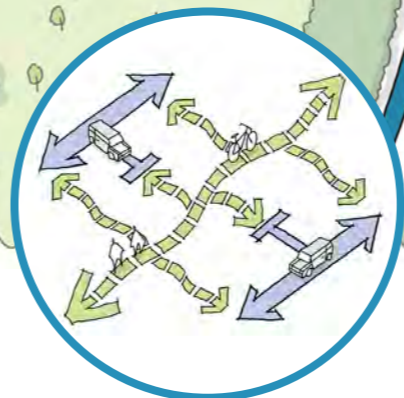
New Local Centre



Public open spaces



Increase in height



Linking into path and cycle networks



New homes



Comprehensive consultation

2.4 Local Centre Vision



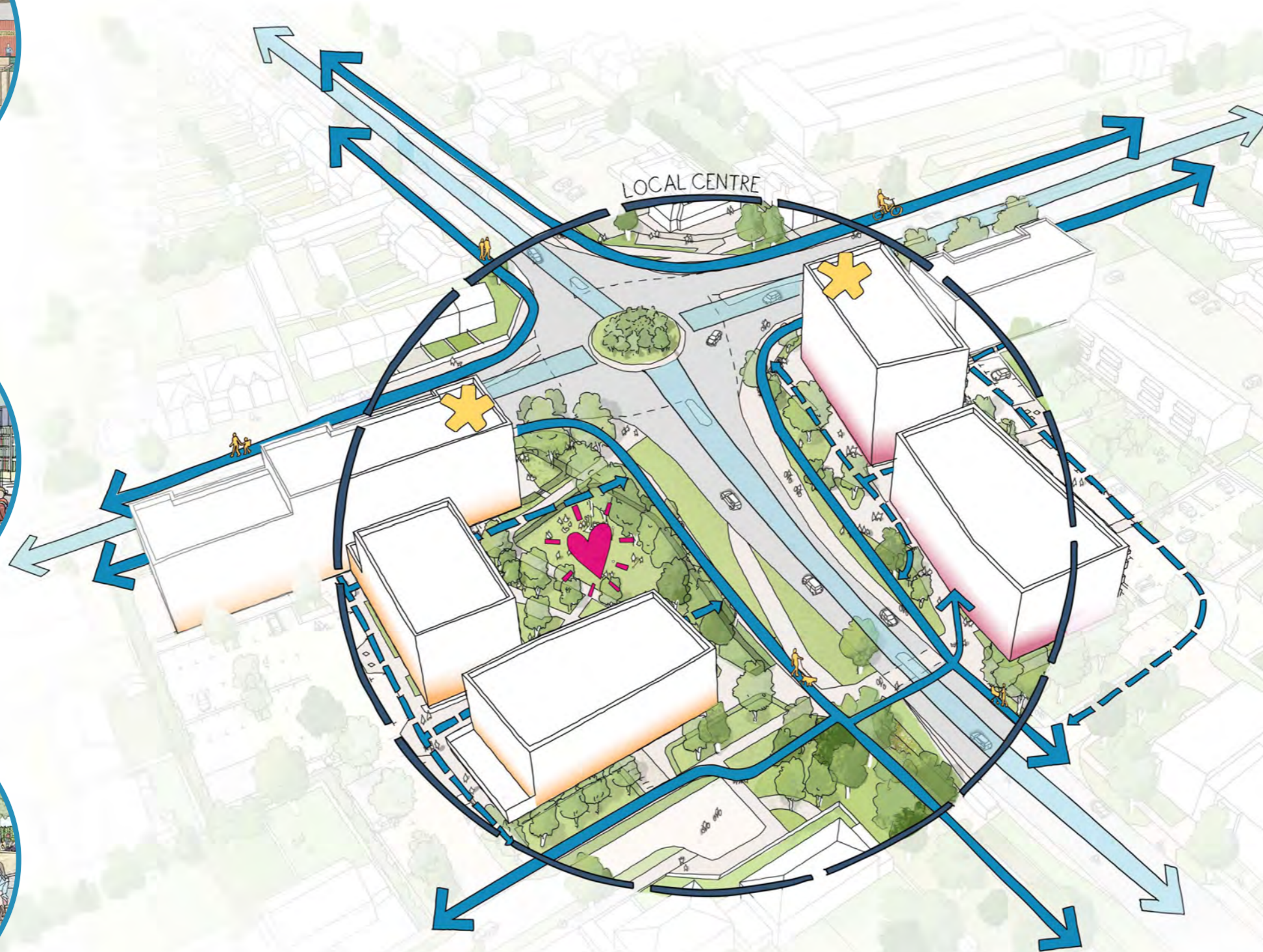
New and improved community facilities



New retail opportunities



Public square for meeting and socialising



Enhanced pedestrian and cycle routes



Public green spaces



Tree-lined streets with biodiverse planting

2.5 Timeline and Consultation Process

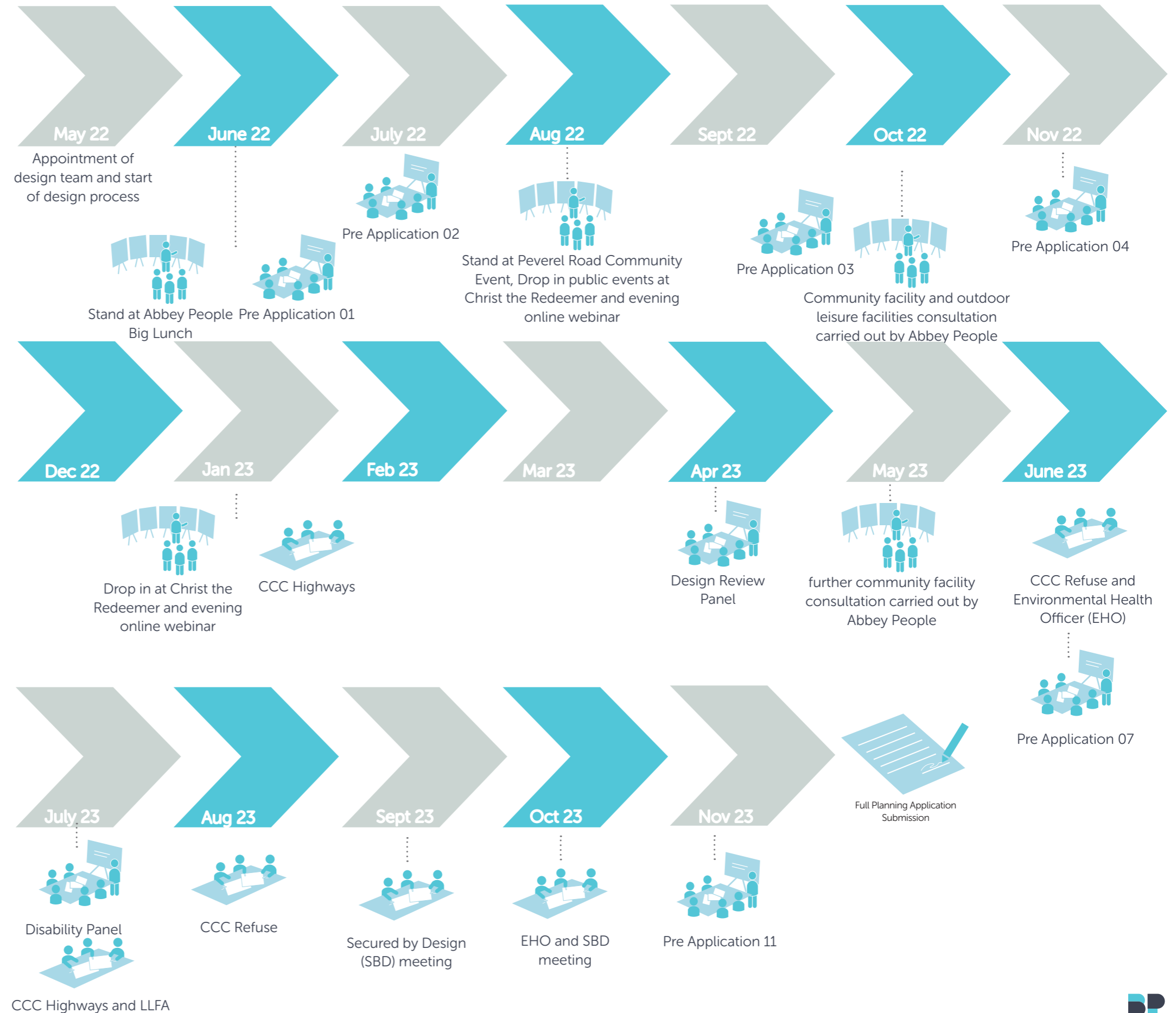
Throughout the design development process, the design team has regularly consulted with Cambridge City Council, Housing Strategy, Community Facilities Managers, Environmental Health Officer and other statutory bodies such as Cambridge County Council (Highways and Refuse) and Crime Prevention Officers.

To ensure a proposal that meets the needs of the local community, the design team has also regularly consulted and engaged with the local individuals and community groups in various ways relative to their interest and impact on the project. These groups include:

- > Abbey Bowls club
- > Seesaw Pre-School
- > Business Owners
- > Council tenants and leaseholders
- > Cambridge Housing Society (head lease holders of the neighbouring Stepneys building)
- > Stepneys residents
- > RSPCA
- > Abbey People
- > Local public
- > Abbey BMX track founders
- > Christ the Redeemer
- > Cambridge United

Key

-  Workshops and Meetings
-  Pre Application
-  Community Engagement Events



2.6 Community Facilities

The proposed development aims to deliver a high quality regeneration of the area by amalgamating all the existing surrounding community provision into one development as well as improving and increasing the provision.

Public Realm

The proposed development aims to improve the existing open public realm for the use of the local residents.

In Site 1, a soft landscaped, new open public green is proposed adjacent to the new Community Centre and Library, with generous lawn with mature trees, seating adjacent to a commercial space (perhaps a cafe), and play areas.

In Site 2, a hard standing, new public square with trees and seating is proposed along a new retail frontage.



Local Centre Spaces

Community Facilities			
	Existing (m ²)	Proposed (m ²)	Difference (m ²)
Community Centre	331	550	+84
Library	135		
Pre-school	181	184	+3
Commercial	435	499	+64
Total	1,082	1,233	+151

N.B. areas are approximate and include local centre associated ancillary spaces

2.7 Community Centre and Library

The community centre and library layout has been developed following an extensive consultation process and aims to incorporate feedback received from the client, stakeholders and the community.

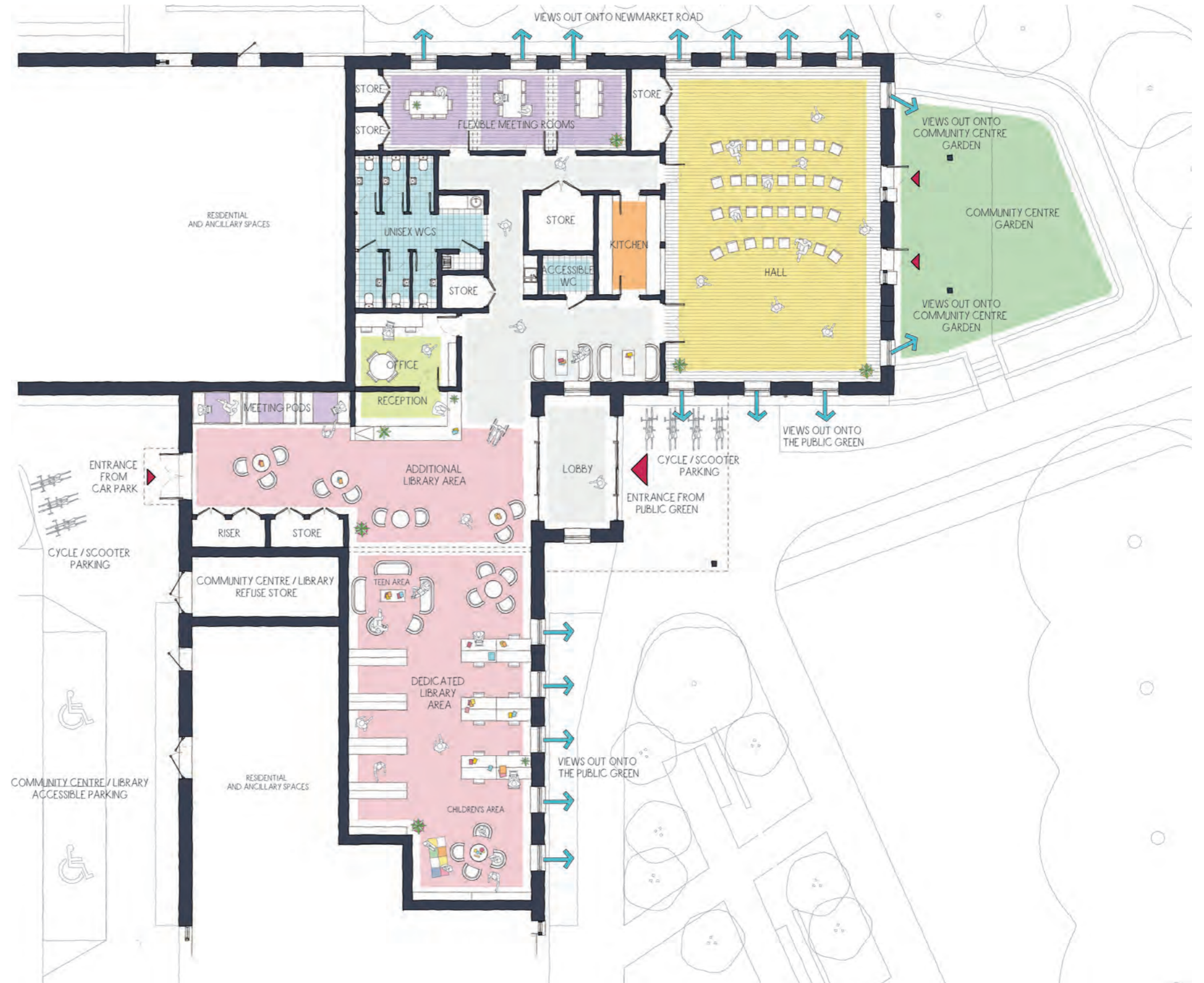
The adjacent plan illustrates how the spaces within the community centre can be laid out to meet all the requirements, subject to further detail design.

Community Centre

- > A spacious hall is provided which opens up to the community centre garden to the east and has active views onto the public green and onto Newmarket Road.
- > All three meeting rooms have windows facing north onto Newmarket Road. The meeting rooms can be divided or combined as required.
- > The office and reception are located at the centre, adjacent to the main entrance, allowing for easy access for users of both the library and the community centre.
- > The carpark entrance is located directly across from the main entrance with community centre and library accessible parking directly adjacent.

Library

- > The dedicated library area activates views out onto the public green as well as providing natural light inside the space. This area can be closed off with a moveable wall for security after hours.
- > A children's area and a teen area are provided within the library.
- > Additional library area is located at the central access space which includes three meeting pods and additional seating.



2.8 Pre School

The pre-school layout has also been developed following an extensive consultation process and aims to incorporate feedback received from the client, stakeholders and the community.

The adjacent plan illustrates how the spaces within the pre-school can be laid out to meet all the requirements, subject to further detail design.

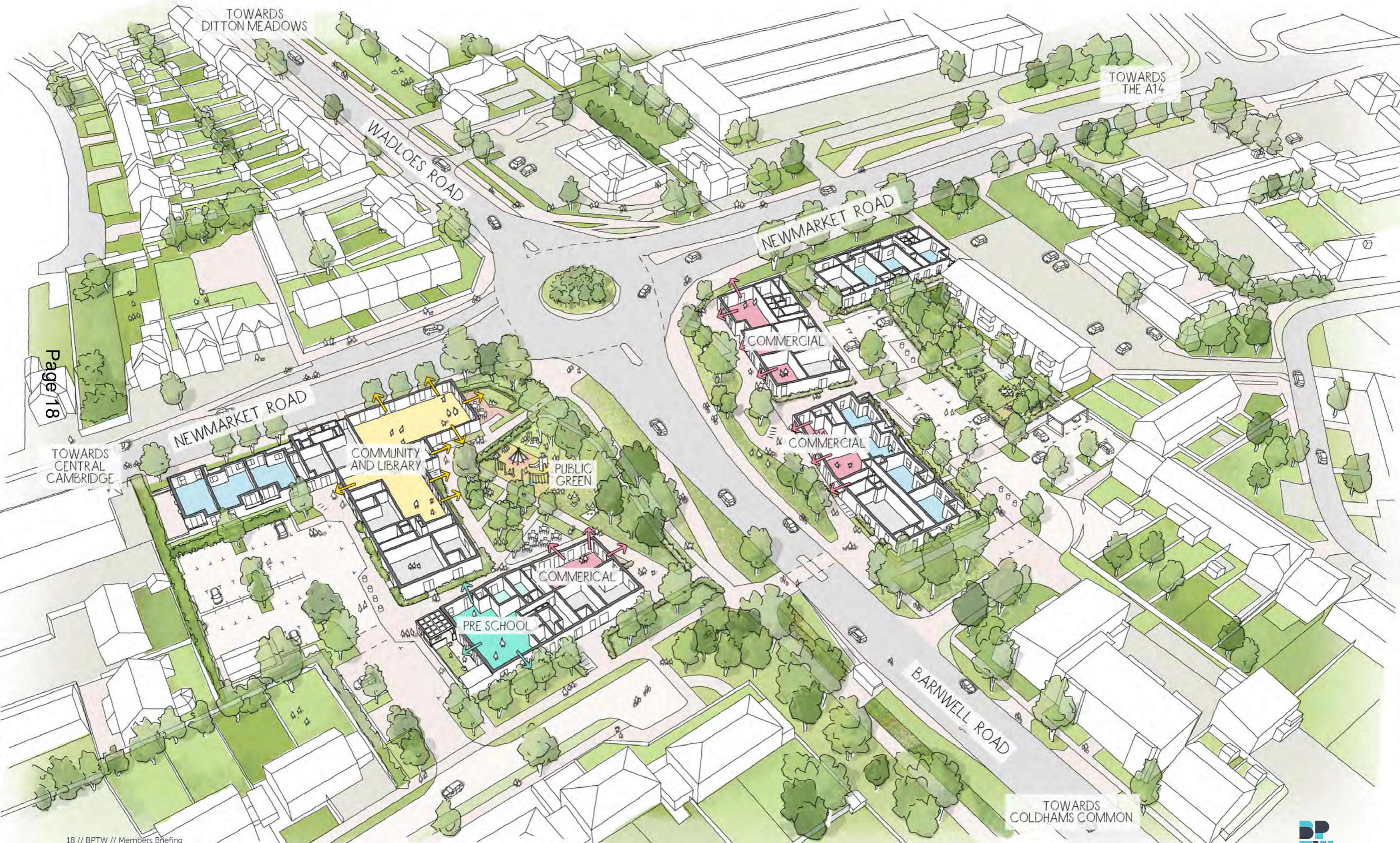
Pre-school

- > The main classroom is located to the south west corner of the pre-school with direct access to and active views out onto the outdoor play space.
- > The outdoor garden space is separated into a covered and uncovered space to accommodate different weather conditions.
- > A group study space, a wet area, toilets, kitchen and storage can all be accessed directly from the classroom, allowing for easy access during day-to-day activities.
- > The kitchen also includes a window hatch for visibility and has a bar type arrangement for children to cook with staff. The kitchen also has access out onto Rawlyn Close to give easy access onto the adjacent refuse store.
- > The staff office is located adjacent to the main entrance with window hatches into the lobby and classroom.
- > A large external store is provided for storing play equipment and other resources used for day-to-day outdoor activities.
- > A dedicated secure bike and scooter store is located adjacent to the main entrance so that parents can leave childrens' bikes and scooters in a secure place during the day, aimed to encourage walking and cycling.



3.0 Proposal

3.1 Layout



3.2 Massing



3.3 Site Layout - Ground Floor Plan

The ground floor plan has been designed to maximise community usage onto the new public green and improved public plaza with carparking

These spaces have direct access and large openings out onto the new public realm to create vibrant public areas for local people to enjoy and maximise activity and natural surveillance.












The centre of the sites is fronted by the Community Centre and Library (coloured in yellow), and commercial spaces (coloured in red) with the preschool located to the entrance of Site 1.

Ground floor homes are located in quieter areas of the sites and adjacent to existing homes to continue the sense of community.

Carparking are tucked away to the rear of the sites. Cycle parking spaces are located within easy access of existing cycle network lanes and in highly visible areas of the buildings to promote sustainable travel.



Key

- | | |
|--|--|
|  Site boundary |  1bed |
|  Community and Library |  2bed |
|  Pre-school |  3bed |
|  Commercial |  Primary residential entrances |
|  Local Centre entrances |  Secondary residential entrances |
| |  Maisonette residential entrances |

3.4 Site Layout - Typical Floor Plan

The proposal will provide 120 high quality affordable residential accommodation that fulfils the full potential of the site.

Providing homes above community and local centre usages will further activate the site and establish a new community centre where people live, work, shop, play and congregate.

The proposal provides a variety of accommodation for different household needs from 1 bedroom 2 person homes to 3 bedroom 6 person maisonettes.



Block	Homes				Total
	1bed flat	2bed flat	3bed flat	3bed mais.	
A/B	8	20	4		32
C	6	6			12
D	2	6	2		10
E	15	15			30
F	11	3	3	4	21
G	1	11	3		15
	43	61	12	4	120
	36%	51%	10%	3%	

Key


















- Site boundary
- 1bed
- 2bed
- 3bed

3.5 Landscape Plan - Existing Highways Layout

The proposals create a vibrant local centre with high quality open space that will:

- Establish strong connections between community, commercial and residential uses and new public realm;
- Create generous and well-proportioned open spaces;
- Retain existing trees and hedgerow where feasible and appropriate;
- Support new/improved cycle and pedestrian links;
- Buffer residential properties from existing streets and public spaces.

Key

- | | |
|---|---|
|  East Barnwell site boundary |  Access (community use) |
|  Site reference |  Access (commercial) |
|  Building |  Access (residential) |
|  Community use (Ground floor) |  Local Centre pedestrian circulation |
|  Commercial use (Ground floor) |  Lawn / meadow / garden |
|  Cafe (Ground floor) |  Shrub & perennial planting |
|  Pre-school (Ground floor) |  Existing trees |
|  Residential (Ground floor) |  Proposed tree |
|  Communal/ancillary (Ground floor) | |



EAST BARNWELL LOCAL CENTRE - LANDSCAPE PLAN (EXISTING HIGHWAY)

3.6 Landscape Plan - CEA Highways Layout

The adjacent diagram shows the East Barnwell Local Centre scheme in the context of the latest GCP Cambridge Eastern Access (CEA) proposals (Oct 23).

The two design teams meet regularly to ensure that the schemes are co-ordinated and address one another.



Key

- East Barnwell site boundary
- 1 Site reference
- Building
- Community use (Ground floor)
- Commercial use (Ground floor)
- Cafe (Ground floor)
- Pre-school (Ground floor)
- Residential (Ground floor)
- Communal/ancillary (Ground floor)
- ↔ Access (community use)
- ↔ Access (commercial)
- ↔ Access (residential)
- Local Centre pedestrian circulation
- Lawn / meadow / garden
- Shrub & perennial planting
- Existing trees
- Proposed tree

EAST BARNWELL LOCAL CENTRE - LANDSCAPE PLAN (WITH GCP CEA HIGHWAYS)

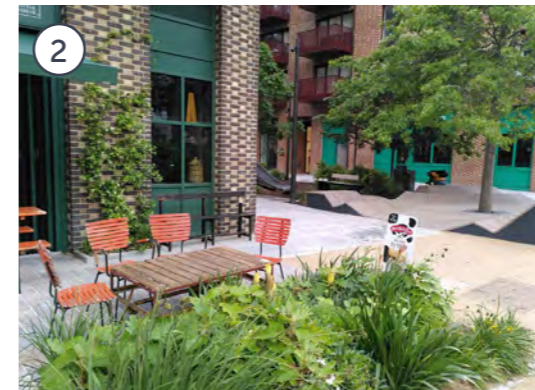
3.7 Site 01 Landscape - Use



SITE 01: USE



Lawn areas framed by mature trees & planting



Cafe outdoor seating



Equipped play



Quiet seating areas amongst planting



Tree lined residential frontage

3.8 Site 01 Landscape - Existing Trees & Hedging



SITE 01: TREE & HEDGE RETENTION & REMOVAL



Existing line of mature *Acer platanoides* (Norway Maple) to be retained.

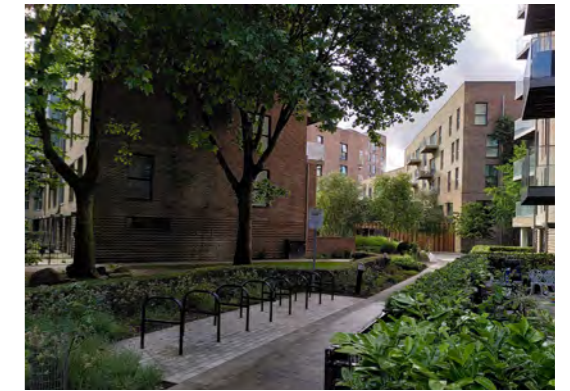
3.9 Site 01 Landscape - Planting & Biodiversity



SITE 01: PLANTING, BIODIVERSITY & SUSTAINABLE DRAINAGE



Wildflower



Mid height hedging for definition



Rain garden - foliage mix



Lawn beneath mature trees

Key

- East Barnwell site boundary
- Building
- Biodiverse green roof
- Species rich lawn
- Wildflower
- Shrub & perennial (>50% of known wildlife value)
- Rain garden - foliage mix
- Existing tree
- Proposed tree
- Existing hedge (c. 2m high)
- Proposed hedge (0.8-1.2m high)

3.10 Site 02 Landscape - Use

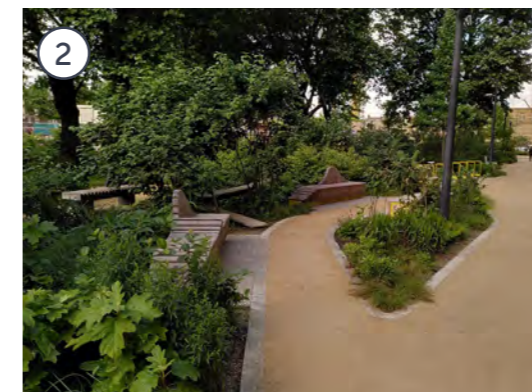


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SITE 02: USE



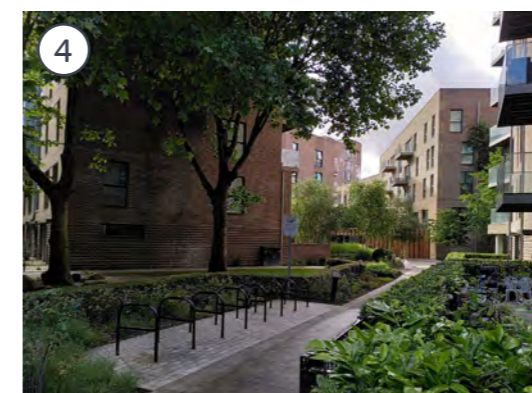
1 Generous paved commercial frontage with planting and informal seating



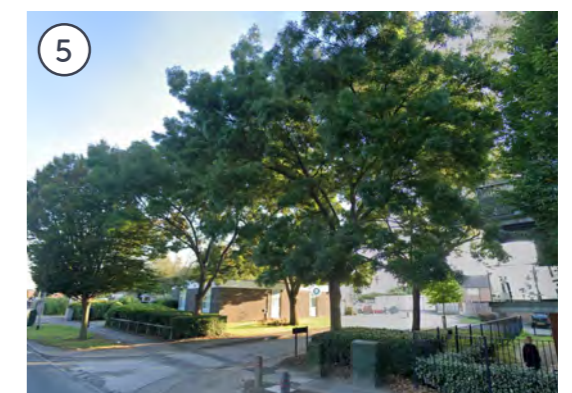
2 Informal seating framed by planting



3 Clearly defined residential amenity



4 High quality pedestrian connections



5 Celebrate existing mature trees

3.11 Site 02 Landscape - Existing Trees & Hedging



Key

- East Barnwell site boundary
- 1 Site reference
- Building
- Category B tree
- Category C tree
- Category U tree
- Propose to remove
- Propose to retain
- Proposed trees
- Existing hedge to be retained
- Existing hedge to be removed



Existing *Fraxinus angustifolia* (Raywood Ash) to be

SITE 02: TREE & HEDGE RETENTION & REMOVAL

3.12 Site 02 Landscape - Planting & Biodiversity



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SITE 02: PLANTING, BIODIVERSITY & SUSTAINABLE DRAINAGE



Biodiverse green roof



Pedestrian routes flanked by planting



Rain garden - flower-rich mix



Retain Ginkgos to frontage

Key

- East Barnwell site boundary
- Building
- Biodiverse green roof
- Species rich lawn
- Wildflower
- Shrub & perennial (>50% of known wildlife value)
- Rain garden - flower rich mix (>50% of known wildlife value)
- Existing tree
- + Proposed tree
- Existing hedge
- Proposed hedge (0.8-1.2m high)

4.0 Strategies

4.1 Open Space - Existing

The adjacent plan identifies the areas of existing open space across the East Barnwell Local Centre application site.

Site 01 includes a tennis court, bowls club and associated grass areas. Together these form an area of protected open space. An area breakdown for the protected open space is provided in the adjacent table. The tennis court is one of 18 free to use public courts in the City and is available without booking. Abbey Bowls Club is a private club. The grass areas to the north and west of the bowling green are only accessible from the bowls club.

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It is proposed that the bowls club and tennis court be relocated off site. The remaining area of protected open space (2,353m²) will be re-provided on site as new high quality open space.

Site 02 includes a parade of shops, Barnwell Road library and associated public realm. A three storey residential block, with a small garden area to the rear, fronts on to Newmarket Road. The Stepneys residential block, which lies immediately to the east of Site 02, has a small and poorly defined amenity green space to the front. It is proposed to enhance this green space as part of the Local Centre proposals.

There are no existing play facilities within the site.

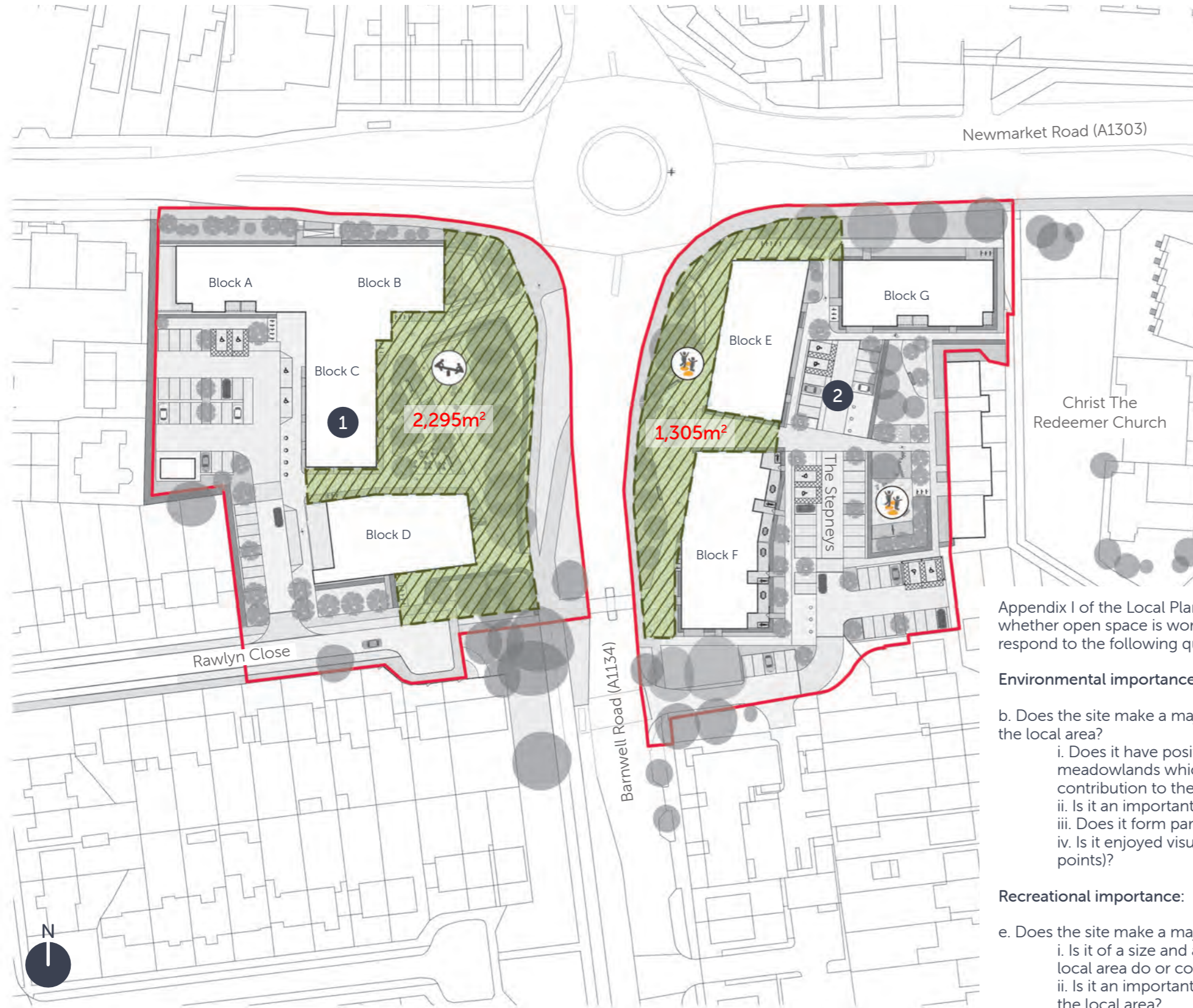


EXISTING ON-SITE OPEN SPACE, PLAY & RECREATION

Protected open space

Open space type	Area
Tennis court (public)	620m ²
Abbey bowls club (private)... of which....	4,995m ²
<i>Bowling green, hardstanding & buildings</i>	2,642m ²
<i>Amenity grass, hedging & trees</i>	2,353m ²
Total	5,615m²

4.2 Open Space - Re-provision



Key

- East Barnwell site boundary
- 1 Site reference
- Building
- Equipped play
- Doorstep/informal play
- Re-provision of open space in response to the loss of protected open space (see Existing Site Plan above). The new open space will be of a better standard in terms of quantity, quality and access, than that being lost.

Appendix I of the Local Plan sets out the criteria and associated questions for assessing whether open space is worthy of protection. The proposed open space will positively respond to the following questions:

Environmental importance:

- b. Does the site make a major contribution to the character and environmental quality of the local area?
 - i. Does it have positive features such as streams, trees, hedgerows or meadowlands which give it a sense of place sufficient to make a major contribution to the character of the local area?
 - ii. Is it an important green break in the framework of the local area?
 - iii. Does it form part of a network of open spaces in the local area?
 - iv. Is it enjoyed visually on a daily basis from public places (e.g. footpaths, vantage points)?

Recreational importance:

- e. Does the site make a major contribution to the recreational resources of the local area?
 - i. Is it of a size and accessibility such that people who live, work or study in the local area do or could use it for recreational purposes?
 - ii. Is it an important part of the network and hierarchy of recreational facilities in the local area?
 - iii. Is it a significant linkage between recreational areas?

4.3 Bowls Club Relocation

Abbey Bowls Club will be relocated to the Abbey Leisure Complex, with a new green, pavilion and associated landscaping provided.


Proposals for the bowls club have been developed in consultation with Abbey Bowls Club, with a series of in-person design review sessions held with members.

The tennis court at the East Barnwell Local Centre site will also be relocated to the Abbey Leisure Complex. The existing under-sized MUGA, located immediately to the west of the main leisure centre building, will be enhanced to provide high quality multi-sports provision for tennis, football, netball and basketball.

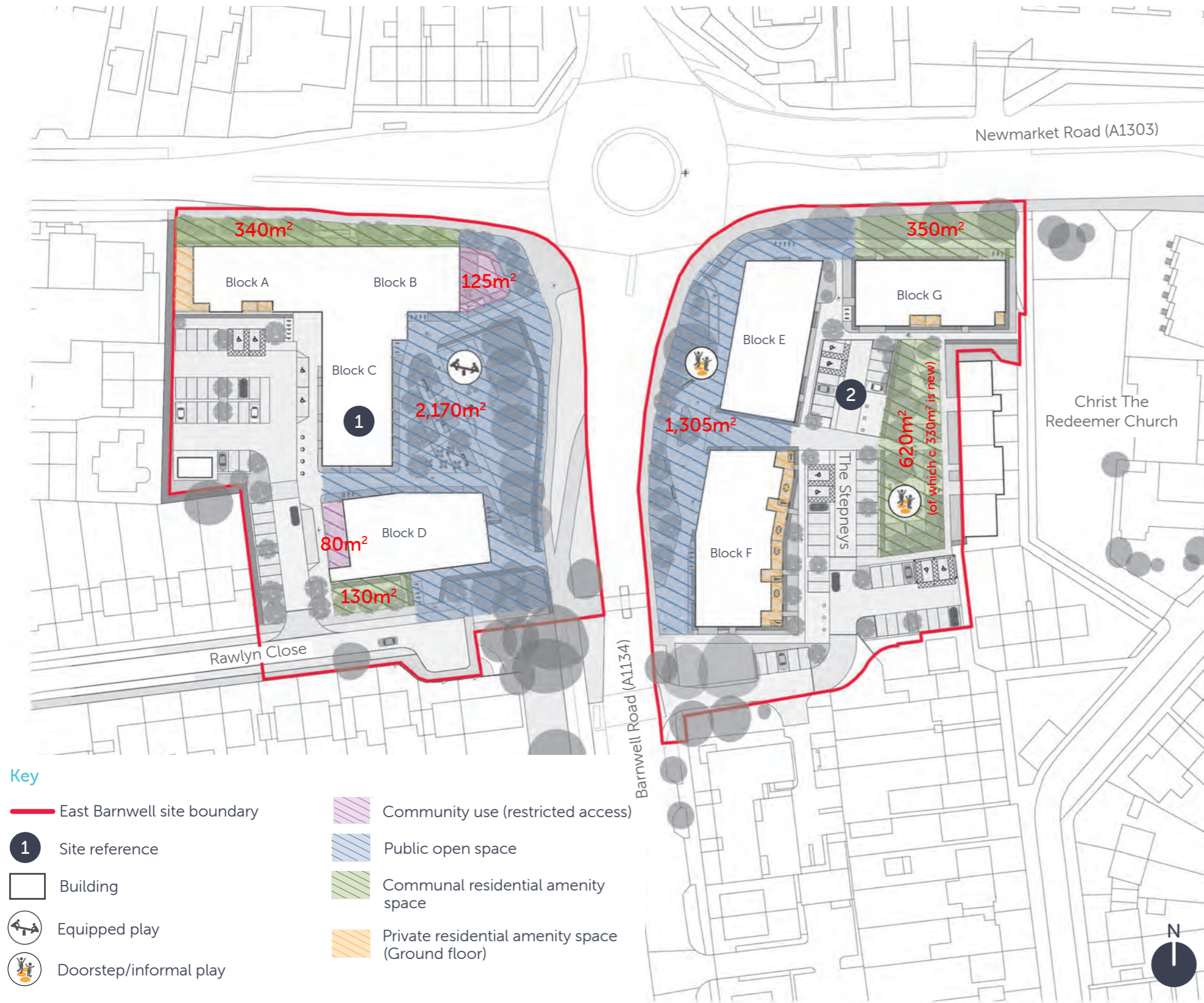


PROPOSALS FOR NEW BOWLING GREEN & PAVILION AT THE ABBEY LEISURE COMPLEX

Key

-  Bowling green
-  Pavilion location
-  Allotment boundary
-  Existing vehicular access
-  Pedestrian access
-  Existing tree
-  Root Protection Area
-  Proposed tree

4.4 Open Space - Typologies



Unit type	Quantity	Expected population
1 bed	43	65
2 bed	61	122
3 bed	16	64
4 Bed	0	0
Total	120	251

	Standards as applied to the proposed development	Proposed provision
		Within site
	0.300 ha	0.000ha
	0.551 ha	0.461ha
	0.056 ha	0.050ha
	0.100 ha	0.000ha

nsisting of one bedroom units
ue and green (exc. area designated for play)

4.5 Tree Strategy

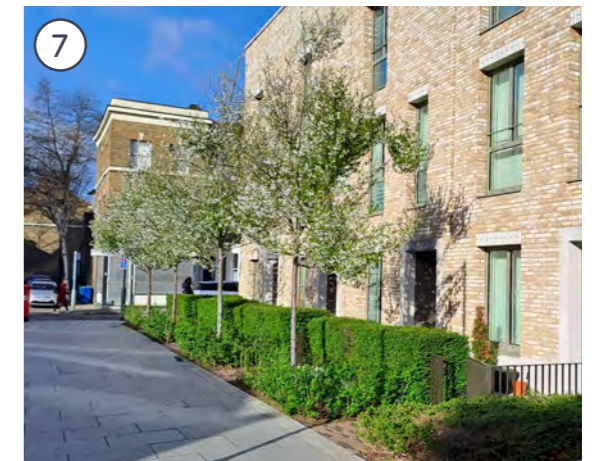
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Platanus x hispanic (London Plane)



Existing Acer platanoides (Norway Maple)



Prunus sp. (Cherry)

Key

- East Barnwell site boundary
- Existing tree
- Proposed tree
- Frontage trees
- Vista stop trees
- Gateway trees
- Open space trees
- Car park trees



Carpinus betulus (Hornbeam)



Corylus corluna (Turkish hazel)



Tilia tomentosa (Silver lime)



Ginkgo biloba (Maidenhair tree)



Acer campestre 'Elsrijk' (Field maple)



Betula sp. (Birch)

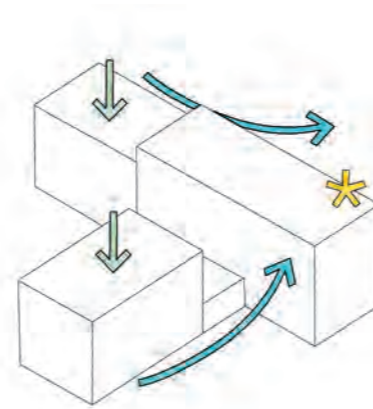
TREE PLANTING STRATEGY DIAGRAM

4.6 Responding to context

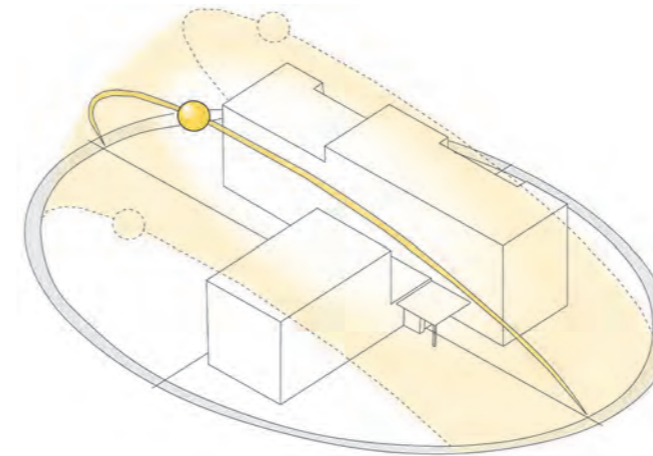
The site is located at the confluence of Newmarket Road and Barnwell Road; with a predominantly northern and eastern (for Site 1) and western (for Site 2) aspect.

To provide a comfortable environment for residents to live in, the following strategies in response to context have been developed through the design process:

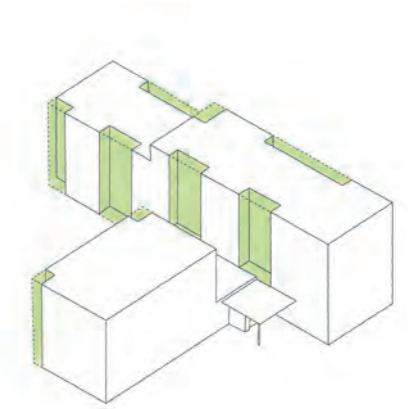
- > Building composition and mass relating to existing urban grain; with buildings stepped down towards the edges of site to better relate existing homes with tall buildings located on corner for way finding.
- > Building placed on site to allow winter solar gains and maximising aspects.
- > Buildings are predominantly east-west facing and where buildings are, from an urban design perspective, required to face north to provide strong frontage onto Newmarket Road, these are designed to be deck access; with deck facing north and main aspect facing south.
- > Alternative means of ventilation is provided as well as natural ventilation through opening windows so that residents are able to keep windows closed to minimise road noise.
- > Inset balconies to provide shelter from the environment and noise from the busy road. Balcony balustrading treatment is varied; from winter gardens to solid upstands to open railings to respond the acoustic conditions on site.
- > Window sizes vary and optimised to balance daylighting needs without overheating units. Larger windows are proposed to north and east facing facades, smaller windows on south and west facing facades.
- > Solar shading above balconies and south and west facing windows.



1 Building mass relating to existing urban grain and adjacent building form



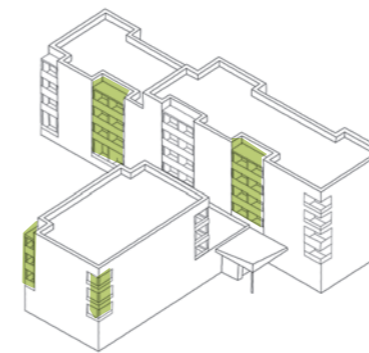
2 Positioning of buildings to allow for winter solar gains and dual aspect



3 Inset balconies to provide shelter from the environment and noise from the busy road



4 Natural ventilation maximising dual aspect
Window sizes to vary depending on aspect



5 Variation in balcony balustrading in response to varying acoustic levels



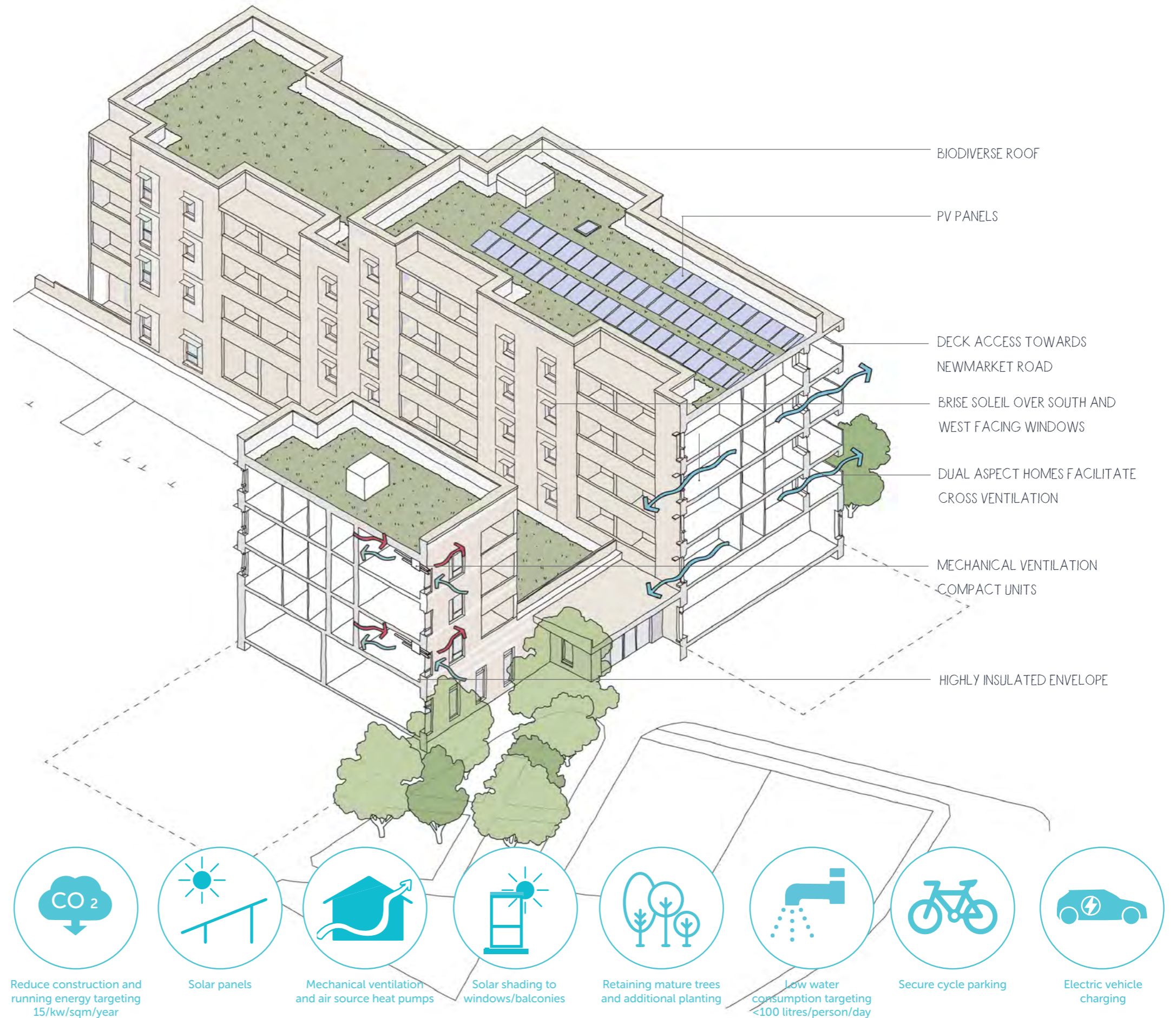
6 Solar shading above balconies and south and west facing windows

4.7 Sustainability

The proposal has been designed with fabric first approach in mind as well as benchmarked against passivhaus standards to ensure a development that reduces energy required for the construction of the buildings as well as reduces the energy use related to running the building which is key to ensuring affordable living costs by lowering running costs for the residents.

Incorporating these principles also creates more efficient and more comfortable living spaces, with better air quality.

- > Well-insulated buildings with a fabric first approach
- > Adding solar panels to offset some of the energy required on site
- > Fully electric scheme with electric vehicle charging
- > Mechanical ventilation which provides additional means to ventilate the homes with heat recovery (MVHR) provided for the cooler months
- > Compact unit in each flat includes air source heat pumps (ASHP) for space heating and hot water
- > Low energy usage targeting 15/kw/sqm/year
- > Low water consumption, targeting <100 litres per person per day
- > Solar shading provided to balconies and south and west facing windows
- > Retaining mature trees and planting more trees
- > Biodiverse green/brown roof
- > Targeting 20% biodiversity uplift on site
- > Secure cycle parking to encourage sustainable methods of transport
- > Large underground iceberg bins provided which require less pick-ups, reducing the carbon footprint



4.8 Dual Aspect Homes

The internal layout of the buildings have been designed to maximise dual aspect homes where possible; with buildings predominantly facing Newmarket Road (Blocks A,B and G) designed as deck access; with deck facing north (Newmarket) and Kitchen/Living/Dining and balcony amenity facing south.

Single aspect homes, where required due to the site arrangement and building footprint are designed to be predominantly 1B homes and none are north facing. Where possible, aspect has been enhanced by providing side windows onto balconies.



Dual Aspect Homes					
Block	Single Aspect	Enhanced Single Aspect	Dual Aspect (corner)	Dual Aspect (through)	Triple Aspect
A/B	-	8	-	16	8
C	-	-	12	-	-
D	-	2	8	-	-
E	-	15	10	-	5
F	6	3	12	-	-
G	-	-	4	8	3
Total	6	28	46	24	16
	5%	23.3%	38.3%	20%	13.3%

Key

- Site boundary
- Single aspect
- Enhanced single aspect
- Dual aspect - corner
- Dual aspect - through (incl. deck access)
- Triple aspect

4.9 Accessibility

The proposal will be designed to be easily accessible to all; with all entrances (main and secondary) to be level access from the gently sloping landscaped public realm. A step and ramp access is proposed where required from Newmarket Road, in line with the GCP highways proposal.

All homes are designed to Building Regulations Approved Document category M4(2): Accessible and adaptable dwellings and a total of 4no are designed to Building Regulations Approved Document category M4(3): Wheelchair user dwellings. These are evenly spread across the two sites and are located on the ground floor of Block A (Site 1) and Block G (Site 2). Each accessible home has its own dedicated accessible parking bays located as close as possible to the carpark entrance of their building.

Accessible spaces for visitors are also provided with 2no accessible spaces for each site, for Site 1 these are located adjacent to the community centre / library carpark entrance and for Site 2, 2no accessible spaces are proposed for the commercial units located adjacent to the access route between Block E and Block

Additionally, 2no, covered, accessible spaces are reprovided for the Stepneys. These are located within the same distance as the existing accessible spaces.

Key

- Wheelchair homes
- Residential accessible parking spaces
- Local centre visitor accessible parking spaces
- Stepneys accessible parking spaces



4.10 Carparking and Cycle

Car parking

The breakdown of car parking is shown below and coloured opposite. There are dedicated spaces for the residents and for the local centre uses, as well as for the Stepneys reprovision of existing on Site 2.

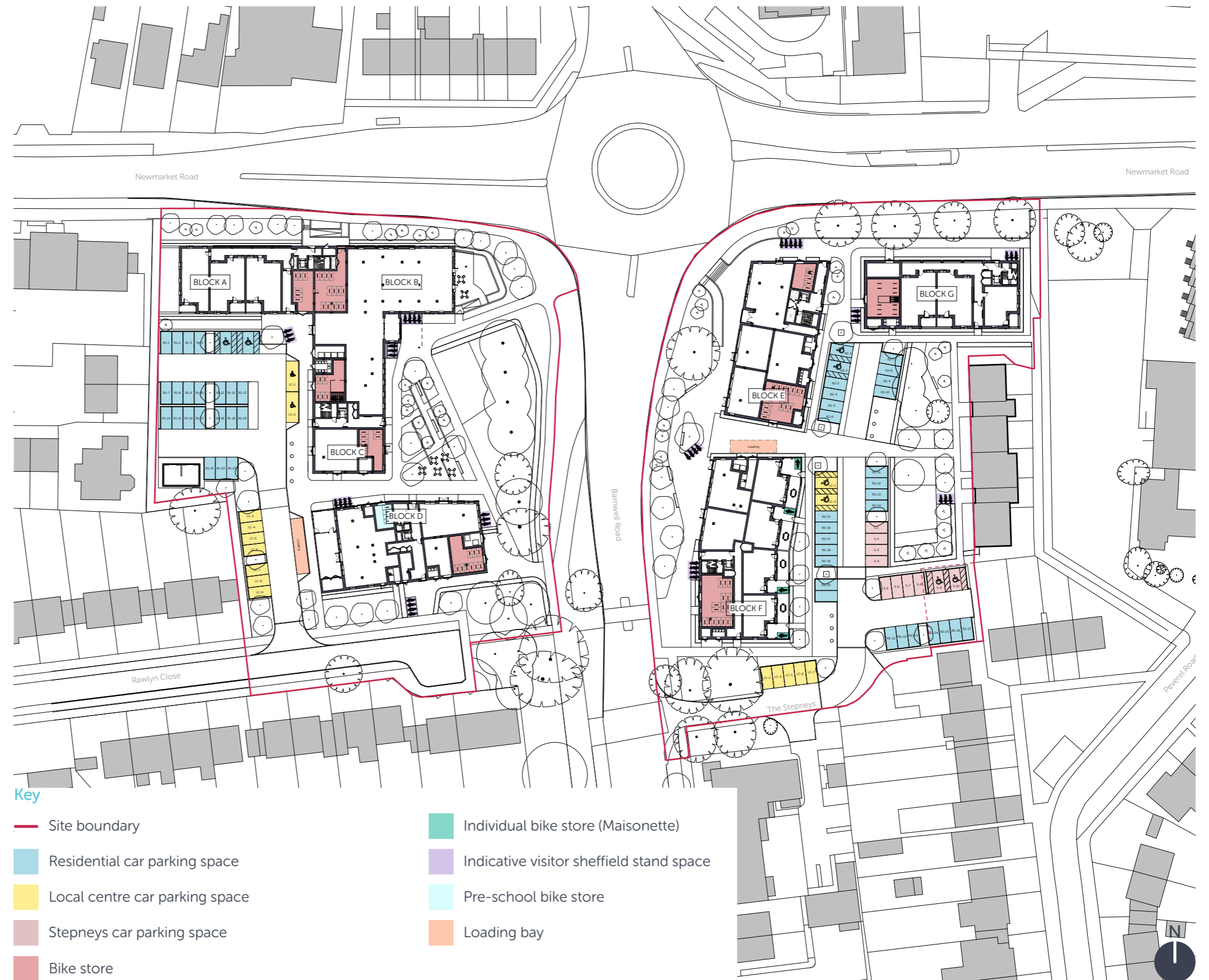
Parking				
	Homes	Residents' Parking	Local Centre Parking	Total
Site 1	54	23 (0.43)	9	32
Site 2	66	27 (0.41)	7	34
Total	66 spaces + 10 for the Stepneys in Site 2			

Cycle parking

Each flat block has dedicated secure cycle stores near / on the public routes for easy access from public cycle lanes with 5% of the total dedicated cycle parking sized for large cargo bikes.

Additionally the residents in the maisonettes have their own low level cycle store in their front garden.

Cycle Parking			
Site	Block	No. of homes	No. of bikes (1 per bed)
Site 1	AB	32	60
	C	12	18
	D	10	20
Site 2	E	30	45
	F	21	38
	G	15	33
		120	214



5.0 Architectural Design

5.1 Site 01 Buildings

Ground Floor Plan

The proposal for Site 1 is of 4 buildings; Blocks A,B,C and D composed to provide a strong frontage to Newmarket Road to the north and to provide a backdrop to the public green to the east of the site.

Main community and local centre usage is maximised to the east of Blocks B, C and D, around the public green to maximise activity and natural surveillance to the spaces. Carparking is tucked away to the west of the site.

On the ground floor, the new community centre and library is located in Block B and C; with frontage maximised out onto the new public green. The hall to the north opens out to the secure community garden and the library to the south has windows facing out onto the public green.

The Preschool is located in Block D to the south of the site, adjacent to the main vehicular access with its own private garden. A small commercial unit to the north of Block D, opening out to the public green with seating in front.

Main residential entrances are located on active facades; from Newmarket Road, Public Green and Rawlyn Close with secondary carpark access provided directly opposite for ease of access and permeability.



Typical Floor Plan

Block A and B are four and five storeys buildings fronting Newmarket Road. As the buildings are located close to the busy road and as a north and south main aspect, it has been designed as dual aspect; deck access with deck facing north and main habitable rooms and private balcony facing south.

Block C is a four storey building located at the centre of the block with homes having predominantly east or west facing aspect. Green/brown biodiverse roof is proposed to the 1 storey connection.

Block D is a three storey building located to the south of the site and is placed to complete the urban grain of Rawlyn Close as well as provide strong frontage onto Barnwell Road and the crossing between Site 1 and Site 2.



5.2 Site 02 Buildings

Ground Floor Plan

The proposal for Site 2 is of 3 buildings; Blocks E, F and G composed to provide a strong frontage onto Newmarket Road and to provide a backdrop to the public plaza to the west of the site.

Commercial units are proposed on the ground floors of Block E and Block F, with doors opening out directly onto the public plaza. Carparking is accessed from the existing Stepneys vehicular access and is located to the rear of Blocks E and F.

An enlarged and improved green space is proposed to the front of the Stepneys. Homes are located on the ground floor of Block G and Block F to enclose the new improved green and complete the urban grain and to relate to The Stepneys flat block.

Main residential entrances are located on active facades; from Newmarket Road, and the new public plaza with secondary access provided from the carpark or The Stepneys for ease of access.



Typical Floor Plan

Block E to the north of Site 2 is a six storey building, and act as a focal, wayfinding focus of the development. It is a linear building with homes having predominantly east and west facing aspect.

Block F to the south of Site 2 is a four storey building following the orientation of Block F to the north and is lower in height to transition to existing three storey building to the south. The main entrance of the building has been positioned directly in sightline of the pedestrian crossing linking Site 1 and Site 2.

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Block G is a four storey located to the north east of the site; with a similar footprint as the existing flatted block. The siting of the building has been designed to ensure minimal impact to the existing ginkgo trees to the north. As the building is located close to the busy road and as a north and south main aspect, it has been designed as dual aspect; deck access with deck facing north and main habitable rooms and private balcony facing south.



5.3 Architectural Design Intent

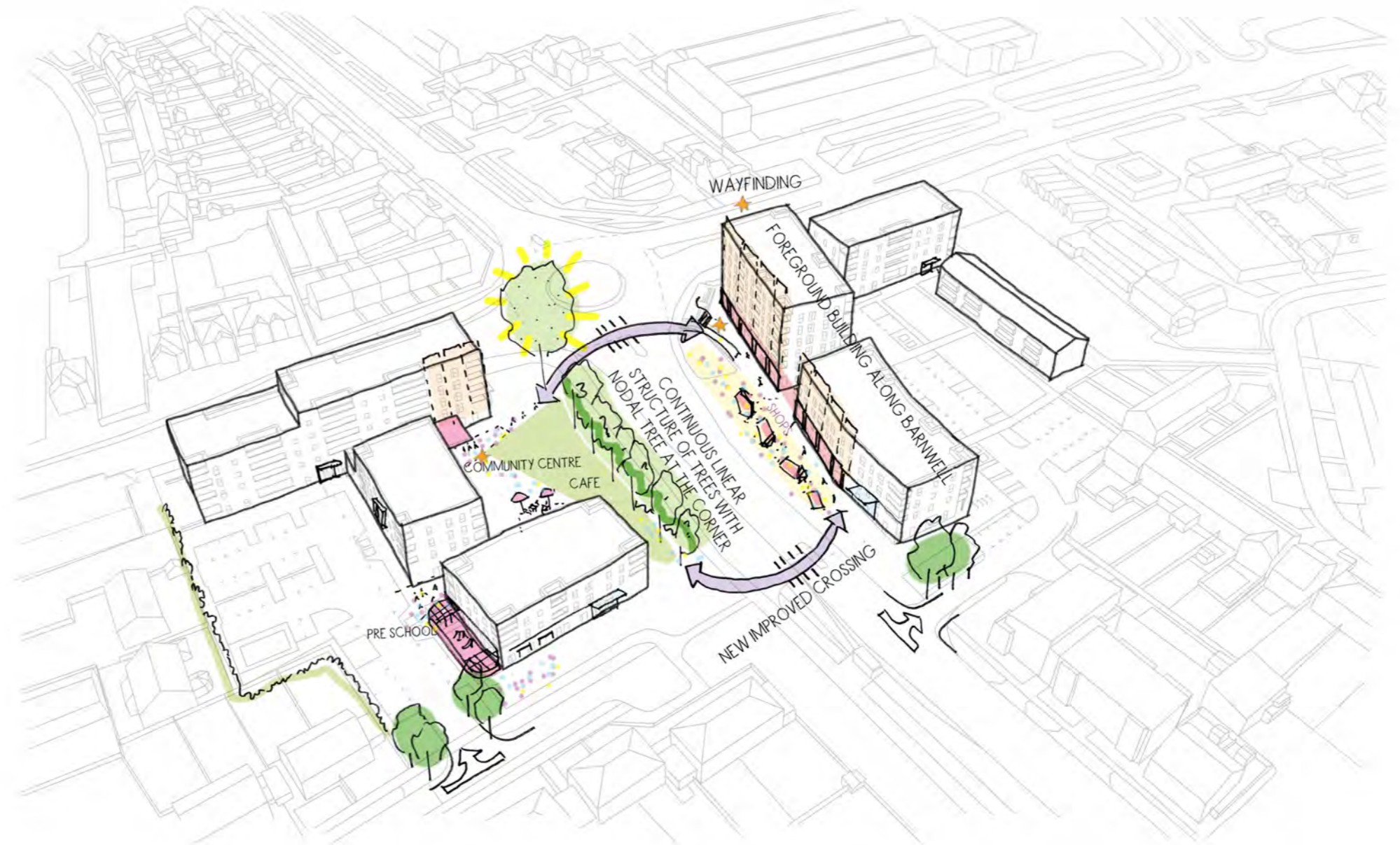
The new East Barnwell local centre vision is to create a thriving and active development positioned at the heart of the area which supports the diverse community of people, living and working within East Barnwell.

The development therefore includes a variety of uses; a community centre, school, and series of commercial units with potential varied usages (cafe, takeaway, barber, food store, etc) with residential buildings above, all set within a new landscape public realm.

To deliver a cohesive, high quality development rooted in the context, our design intent are:

- > Provide a variety of public realm spaces; with complimentary and contrasting areas encouraging activity and movement around the new centre.
- > A continuous, legible structure of trees to one side of East Barnwell set against a backdrop of small footprint buildings blocks placed to allow for light and views through across the site (Site 1)
- > A contrasting but complementary strong building line to the other side of East Barnwell with active retail frontage of ground and buildings set as foreground.
- > Establishing key moments (intersections, gathering spaces and thresholds) within the development to provide key wayfinding points, encourage activities to flourish and embed the development within the existing context.

A series of architectural approach strategies have been developed to ensure our proposals are robust and includes a suitable level of richness to encourage users and create the areas identity.



Each individual buildings and spaces have a varied role to play in its relationship to context and the spaces and moments they create. Therefore, there should be sufficient difference between the elements to generate interest but also a commonality to retain a shared identity of place.

Brick is proposed to be the predominant material across the site due its context, and durable, robust and long lasting properties. The material palette across the development have been chosen to reflect the existing material palette of the area and carefully applied to create a harmonious variation.

The predominant brick colours for the development will be buff/brown bricks with "transition" buildings in a light variegated red brick to add depth and warmth to the development and ensure it is not too monotonous.

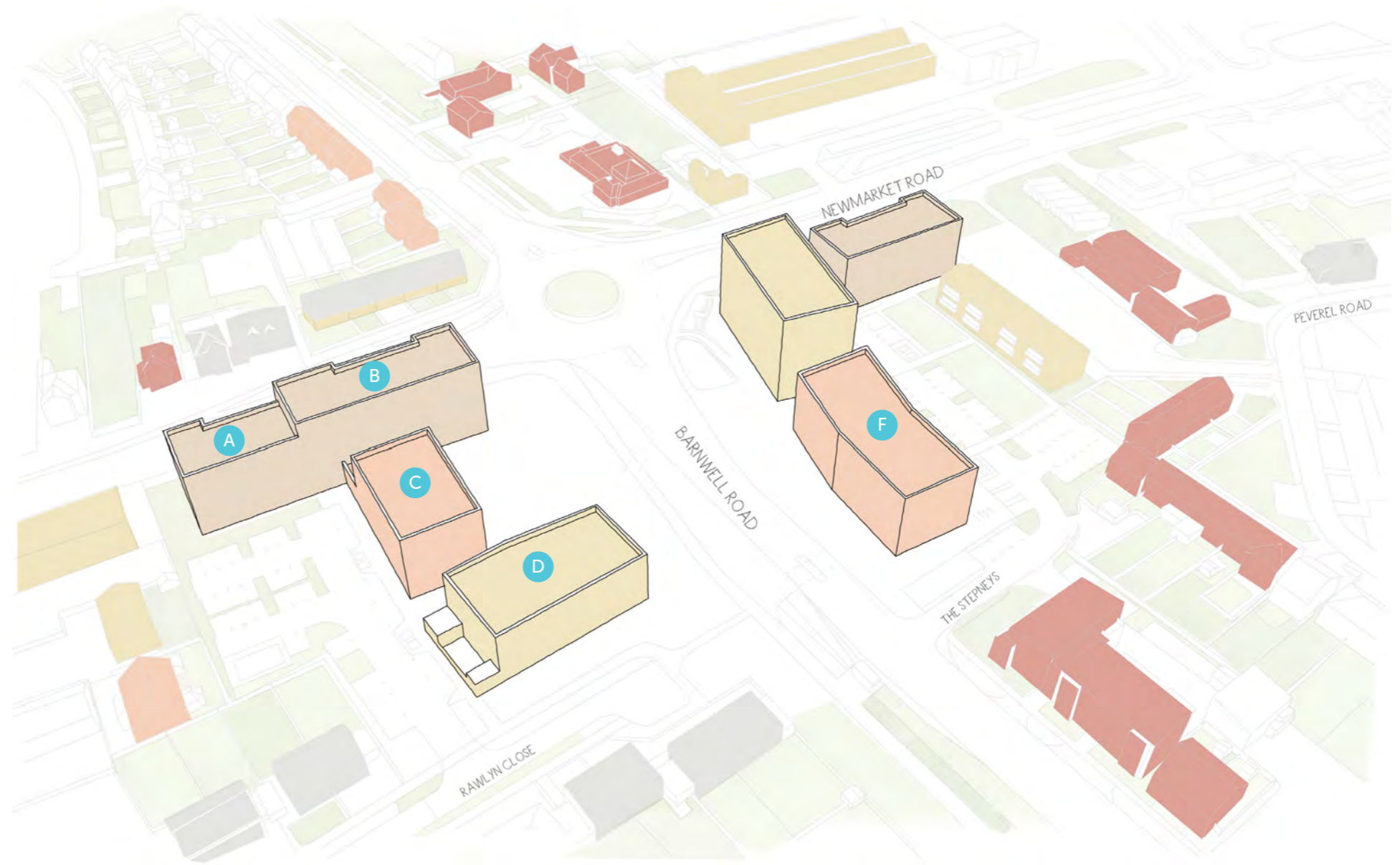
Variegated Light Red Brick



Buff / Light Brown Brick

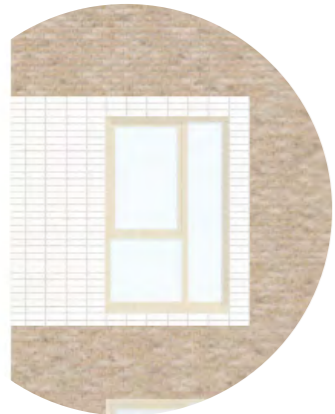


Yellow Brick





5.4 Elevations and Details



Window Brick Surround



Balconies Brick Surround



"Corner" Windows Brick Surround



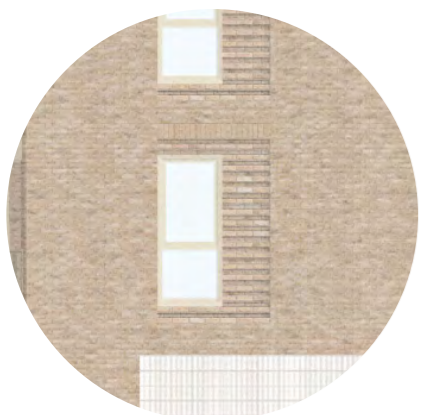
GF Shopfront Brick Surround



Insulated infill panel



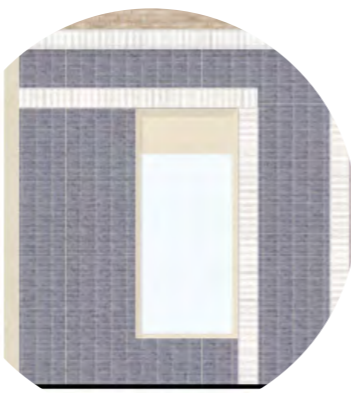
Brick Banding



Alternative brick detail - corduroy bricks

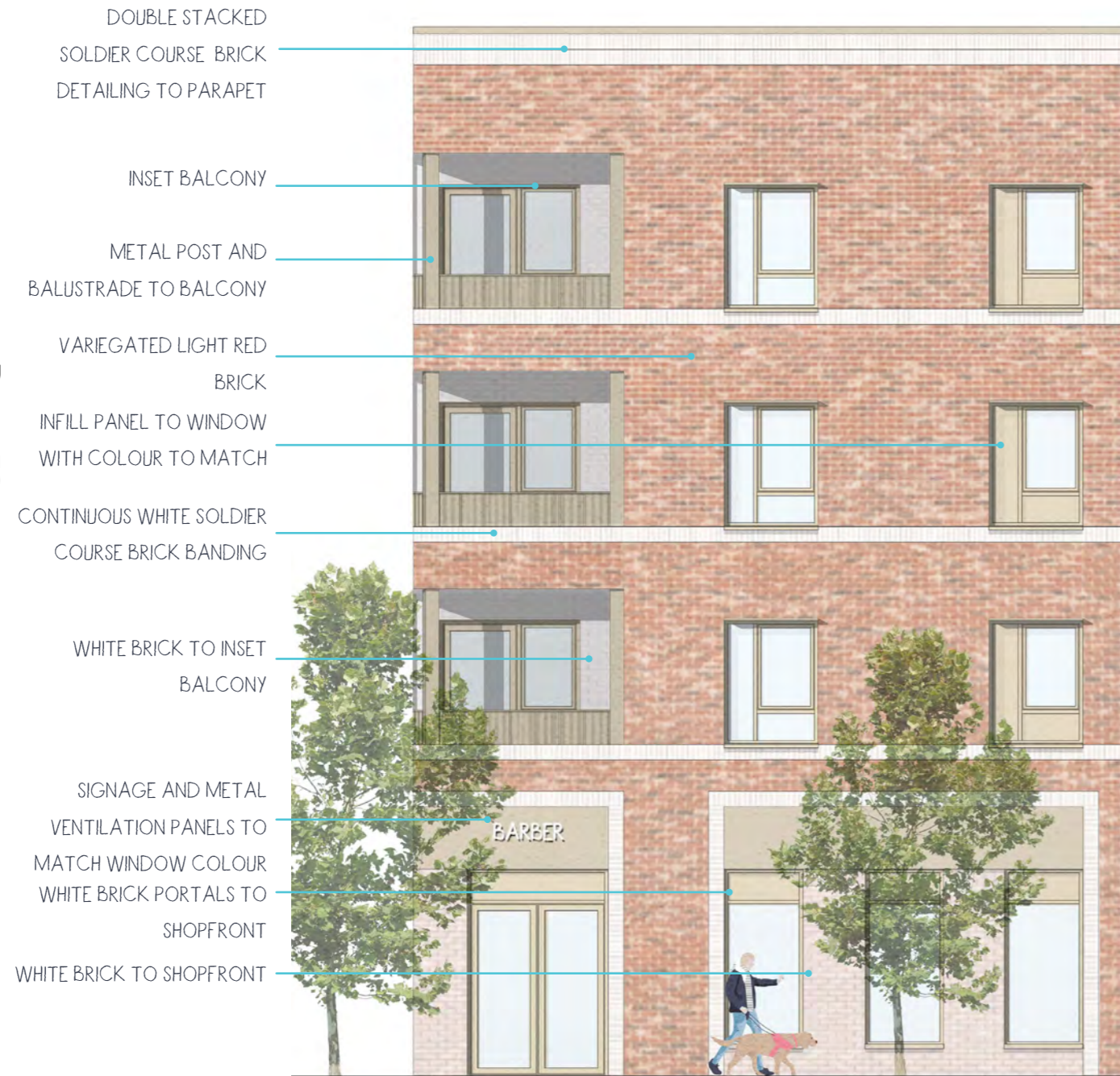


Alternative brick detail - larger bands



Variation in brick colours/patterns





Site elevation of buildings in context and in relationship with one another to begin to show how the variation in building typology, scale, mass and rhythm as well as difference in detailing would provide architectural variation and interest when viewed and experienced in context and as a whole.



Newmarket Road Street Elevation



Barnwell Road Street Elevation



5.5 New Homes

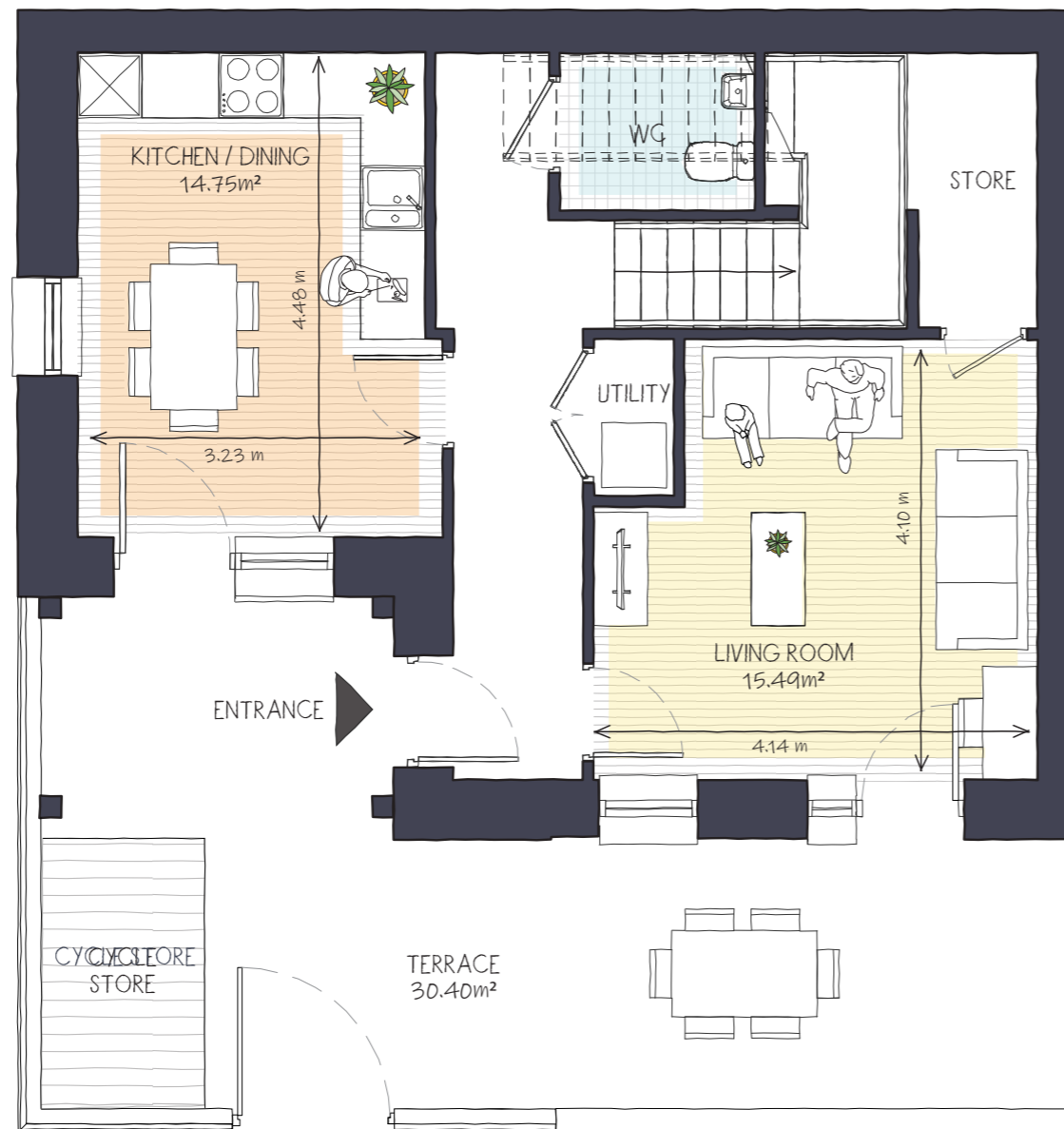
3B6P Maisonette

Location: Site 2 Block F (Ground to First Floor)

Area: 104.2 sqm

- > Generous front garden (terrace) with dedicated cycle store adjacent to front doors.
- > Separate Kitchen/Dining and Living Room proposed with a central corridor.
- > 3 Double Bedrooms on first floor with master bedroom having access to a private balcony.

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1B2P and 2B4P Deck Access Flats

Location: Site 1 Block AB and Site 2 Block G

Area: 50.1 sqm

- > South facing aspect for Kitchen/Living/ Dining and Bedroom, away from the noise of Newmarket Road to the north.
- > Side window for the bedroom to maximise daylight sunlight and cross ventilation.
- > Bathroom to include a shower to reduce water consumption, but is sized large enough for a bath if required



Location: Site 1 Block AB and Site 2 Block G

Area: 71.7 sqm

- > South facing aspect for Kitchen/Living/ Dining and Main Bedroom, away from the noise of Newmarket Road to the north.
- > Window from Kitchen facing Deck

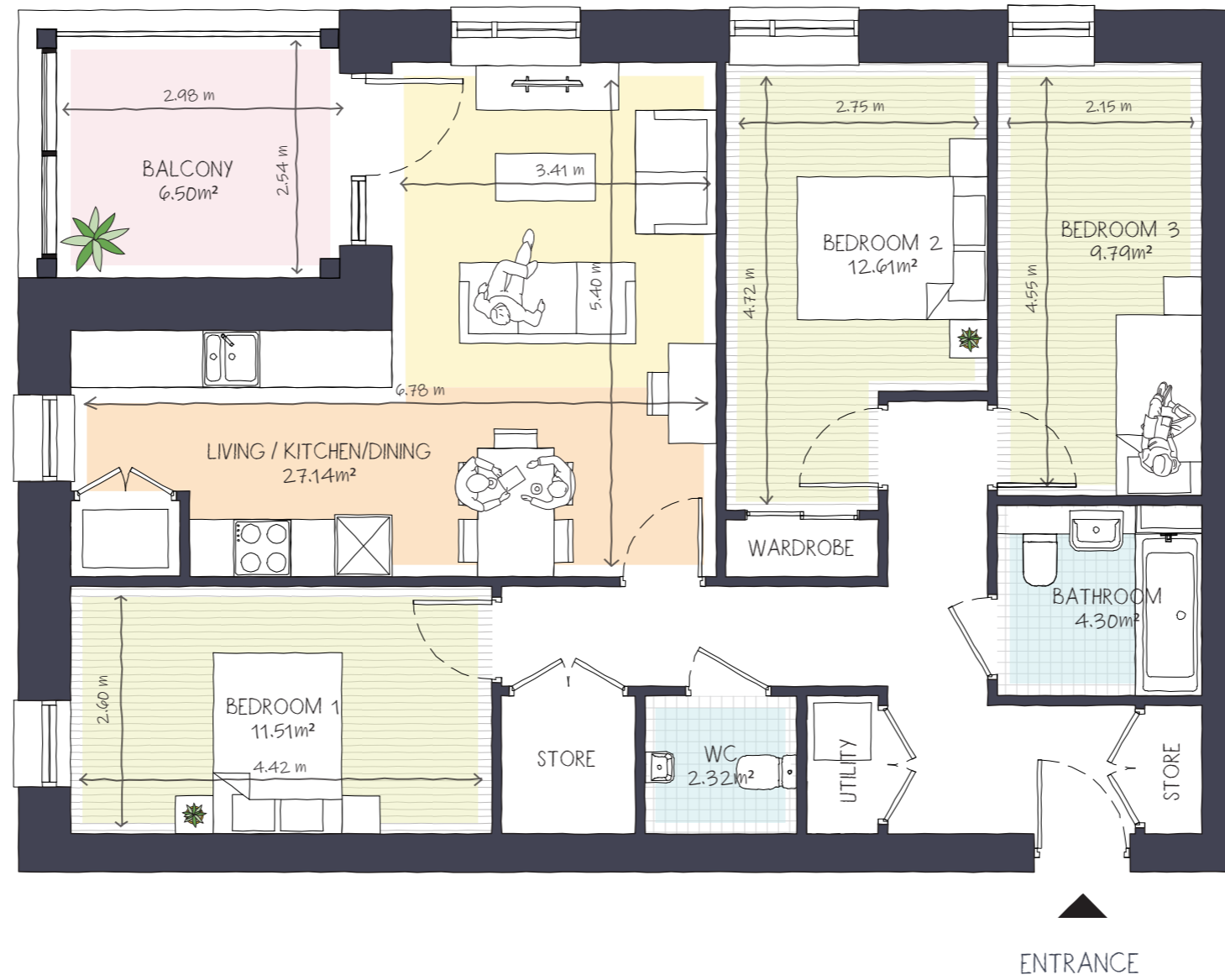


3B5P Dual Aspect Flat

Location: Site 1 Block D

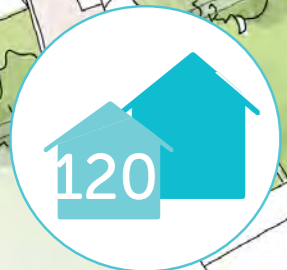
Area: 86.7 sqm

- > Dual aspect flat to maximise sunlight and cross ventilation
- > Glazed acoustic panel to the western end of the balcony to mitigate noise





TOWARDS CENTRAL CAMBRIDGE
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